Form 9-331 C
(May 1963)

SUBMIT IN T ICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, Wyo. 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1613' from south line, 1329' from east line,
At proposed prod. zone: NW 1/4 SE 1/4, Section 4, T10S, R23E, S.L.B.&M.
Uintah County, Utah NWSE

5. LEASE DESIGNATION AND SERIAL NO.: U33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT: Wild cat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 58 miles southeast of Vernal, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 1329'

16. NO. OF ACRES IN LEASE: 1820

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 8800'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5316' Ungraded ground, 5330' KB estimated

22. APPROX. DATE WORK WILL START*: Upon receipt of approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0	200	250 sacks, Circ. to surface
12-1/4"	9-5/8"	36.0	2500	275 sacks.
7-7/8"	4-1/2"	11.6	8800	As necessary to protect all productive intervals.

Operator proposes to drill well to approximately 8800' to test the Mesaverde formation. 9-5/8", 36.0#, K-55 intermediate casing will be run and cemented to protect the oil shale section of the Green River formation. All water flows and significant hydrocarbon shows will be evaluated and reported. The well will be operated according to the attached well program and all applicable regulations. Adequate BOP equipment will be maintained at all times as indicated in the attached Pressure Control Specifications. If commercial production is encountered, 4-1/2", 11.6#, N-80 production casing will be run and cemented to adequately protect all potentially productive intervals. No abnormal pressures or temperatures or other potential hazards are anticipated.

RECEIVED SEP 28 1979

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED R. J. Firth TITLE Petroleum Engineer DATE Sept. 24, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-Div.of OG&M,SLC,UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-File

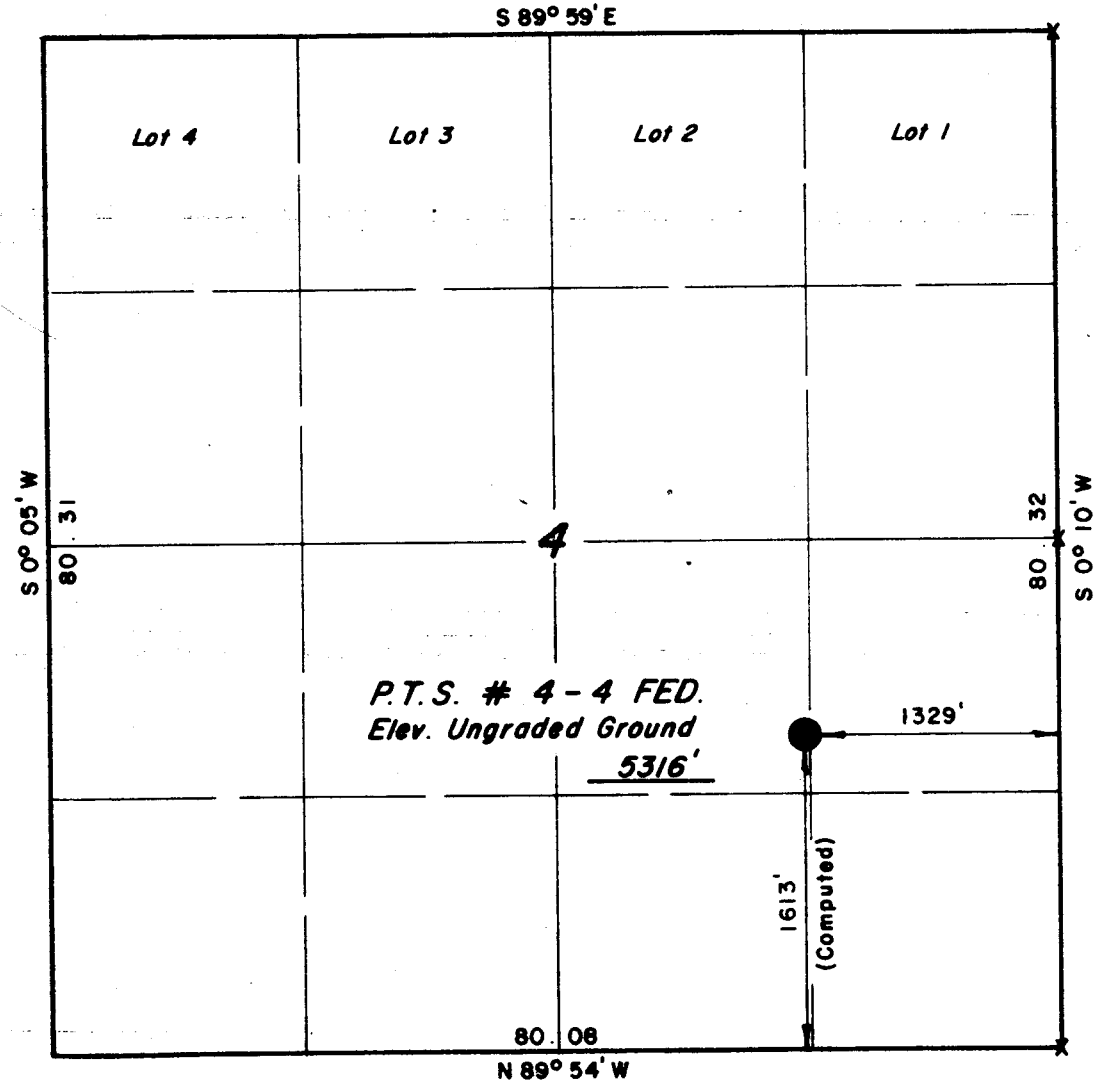
*See Instructions On Reverse Side

PROJECT

PACIFIC TRANSMISSION SUPPLY COMPANY

Well location, *P.T.S. # 4 - 4 Fed.*
located as shown in the NW 1/4 SE 1/4
Section 4, T10S, R 23 E, S.L.B. & M.
Uintah County, Utah.

T 10 S, R 23 E, S.L.B.&M.



X = Section Corners Located

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Dene Stewart

REGISTERED LAND SURVEYOR
REGISTRATION Nº 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q — 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 9 - 20 - 79
PARTY G.S. J.S. B.F.W.	REFERENCES G.L.O. Plat
WEATHER Hot	FILE PACIFIC TRANSMISSION

WELL PROGRAM

WELL: PTS #4-4 Federal

LOCATION: 1613' from the south line and 1329' from the east line of Section 4, T10S, R23E, Uintah County, Utah.

CONTRACTOR: To be selected.

OBJECTIVE: A depth of 8800' should be sufficient to penetrate 300' into the Castlegate.

FORMATION TOPS:

Formation	Depth	Datum
Green River	Surface	
Wasatch	4580'	+ 750
Y-Marker	5880'	- 550
Mesaverde	6180'	- 850
Castlegate	8480'	-3150
Total Depth	8800' or 300' into the Castlegate	

SAMPLES: Collect cutting samples at ten (10) foot intervals from under surface to total depth. Samples will be collected by drilling crews for the wellsite geologist. Two (2) sets of samples will be collected in the oil shale section of the Green River formation with one (1) set to be sent to the Bureau of Mines, Laramie, Wyoming. Frequency of sample collection may be changed at the wellsite geologist's discretion.

ELECTRICAL SURVEYS: The following Logging Program will be employed.

200' - 2500'	12-1/4" hole to 2500'. Run Dual Induction Laterolog, Borehole Compensated Sonic and Compensated Formation Density logs.
2500' - 8800'	7-7/8" hole below 9-5/8" casing. Run Dual Laterolog, Borehole Compensated Sonic and Compensated Formation Density logs.

MUD LOGGER: A portable mud logging unit will be operated by the wellsite geologist from below surface casing to total depth.

TESTING PROGRAM: All significant shows of oil and gas will be drillstem tested. Use floor manifold with positive choke assembly, hydraulic jars, safety joint, reverse circulating sub, sampler assembly and dual packers. Collect samples of all fluids recovered for further analysis.

DRILLING FLUID PROGRAM:

Interval (Feet)	Mud Weight (lbs/gal)	Viscosity (secs/qt)	Fluid Loss (ml/30 min)
0 - 200	----------AIR----------		

Set 13-3/8" casing at 200'.

200 - 2500	8.4 - 8.8	27 - 29	No Control

Drill out surface casing with water, increasing the drilling fluid salinity to about 40,000 ppm NaCl. The salty water will improve hole stability by minimizing swelling shale tendencies and will allow cuttings to settle out rapidly. Utilize available solids control equipment and circulate reserve pit if possible. Occasional sweeps of prehydrated bentonite may be necessary to insure adequate hole cleaning while drilling 12-1/4" hole.

Some loss of circulation is anticipated in this interval. Lost circulation should be handled with conventional types of lost circulation materials with fine mica recommended for minor losses. If severe losses are encountered requiring the use of lost circulation material that will not pass through the shaker screen, consider using pill treatments instead of maintaining lost circulation material in the system continuously. Lost circulation which cannot readily be controlled by more conventional means may justify the use of cement plugs.

Set 9-5/8" intermediate casing @ 2500'.

2500 - Total Depth	9.0 - 10.5	27 - 34	12 - 20 ccs.

Drill out intermediate casing and continue drilling with 60,000-80,000 ppm salt water. Neglecting solids control when drilling with water can result in differential sticking in subnormally pressured, permeable zones. This is due to the thick wall cake which forms as a result of high fluid loss and relatively high solids content. Consequently, if the reserve pit cannot be included in the active system, precautions should be taken to prevent drilled solids from being recirculated. The mud tanks should be dumped and cleaned frequently and all available solids control equipment should be used. Occasional sweeps of prehydrated bentonite, salt gel or asbestos fiber should be used as necessary to clean the hole if tight connections are experienced or excessive fill in encountered. A drilling detergent might be used to provide lubricity and minimize bit balling. Maintain minimum viscosities and solids at all times to approximately 6000'.

(Cont.)

2500 - Total Depth	9.0 - 10.5	27 - 34	12 - 20 ccs.

As it becomes necessary, or at approximately 6000' mud up with salt gel for viscosity, caustic soda for pH control and starch and preservative for fluid loss control. Additions of a lignosulfonate may be used as needed to control the flow properties of the mud. Avoid arbitrarily increasing the viscosity of the mud above that which is recommended. Well site interpretation of hole conditions will help determine the degree of mud up and necessary fluid properties to be maintained.

Higher than normal formation pressures should be anticipated in this interval. Fluid densities of 9.5-10.5 lbs/gal may be required to safely balance formation pressures. Drilling fluid salinity can be adjusted as necessary to increase mud weight without adding additional solids to the system.

Seepage and slight lost circulation may occur as the mud weight is increased. To avoid fracturing weak formations, maintain mud weight, yield point and gels as low as possible without sacrificing safe operations. Care should be taken to minimize swab and surge pressures by avoiding excessive pipe speed while tripping in and out of the hole.

A small stream of water should be run continuously while drilling and the mud tanks should be cleaned frequently to minimize the recirculation of drilled solids and allow the addition of fresh materials to the system. Water should be reclaimed from the reserve pit to conserve water and also reduce some chemical additions.

CASING PROGRAM:

Size	Setting Depth	Hole Size	Cement
13-3/8"	200'	17-1/2"	250 sxs. Class G w-3% Calcium Chloride
9-5/8"	2500'(+)	12-1/4"	Approximately 275 sxs. to be verified after logs are run.
4-1/2"	8800'	7-7/8"	Amount will be determined after logs are run. Use regulated fillup and Class G type cements.

PRESSURE CONTROL EQUIPMENT AND SPECIFICATIONS: Adequate BOP equipment will be maintained as indicated in the attached Pressure Control Specifications. In addition, the BOP equipment will be well-braced with hand controls extending clear of the drilling rig substructure. The accumulator equipment will provide closing pressure in excess of that required with sufficient volume to operate all components. All BOP equipment, auxiliary equipment, standpipe, valves and rotary hose will be tested as per test schedule or to the rated pressure of the equipment at the time of installation. Modification of the pressure control equipment or testing procedure will be approved in writing on tour sheets by the wellsite representative.

DRILLING PROCEDURE

PTS #4-4

1) Move in air precussion rig and drill 17-1/2" hole to 200'. Set and cement 13-3/8", 48.0#, H-40 casing to surface with approximately 250 sacks cement. WOC.

2) Move in rotary drilling rig and equipment. Cut off 13-3/8" casing and install 3000# casing flange. Install BOP equipment and pressure test BOP's, manifold, valves, and annular preventer to 2500# prior to drilling casing shoe. Drill 12-1/4" hole to 2500'. Conduct electric logging and prepare hole for intermediate casing.

3) Set and cement 9-5/8", 36.0#, K-55 intermediate casing sufficiently to protect any water, oil, gas or other mineral-bearing formations. WOC.

4) Land casing and install intermediate spool. Install BOP equipment and retest prior to drilling casing shoe.

5) Drill 7-7/8" hole to total depth. Perform drill stem testing as warranted. Conduct electric logging and prepare hole for production casing.

6) Run 4-1/2", 11.6#, N-80 production casing and cement as necessary across potential zones. The length of the cement column will be determined after the logs have been evaluated.

7) Release rotary drilling rig and develop completion procedure.

Special Instructions:

1) Run deviation surveys at regular intervals and in conjunction with bit trips.

2) Utilize a degasser and necessary solids control equipment.

3) Avoid surging hole on trips and fill hole properly when pulling pipe.

4) All crew members should be familiar with BOP operations. Functional test pipe rams daily and close blind rams each trip out of the hole.

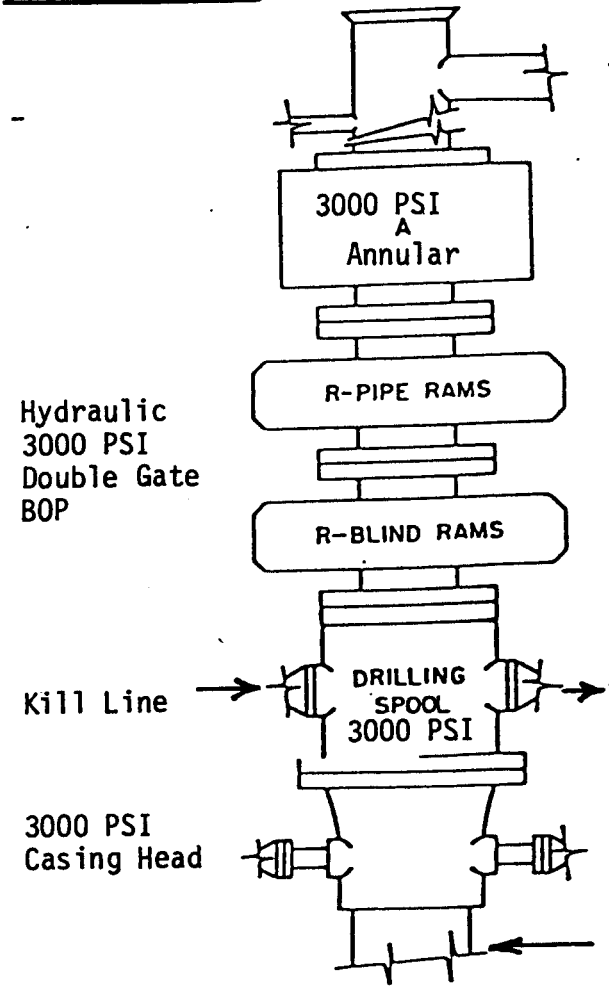
5) Drilling crews should observe to detect either decrease or increase in fluid level.

6) A regular daily mud check should be made by mud engineer.

7) Drill stem testing will be determined by the well site geologist.

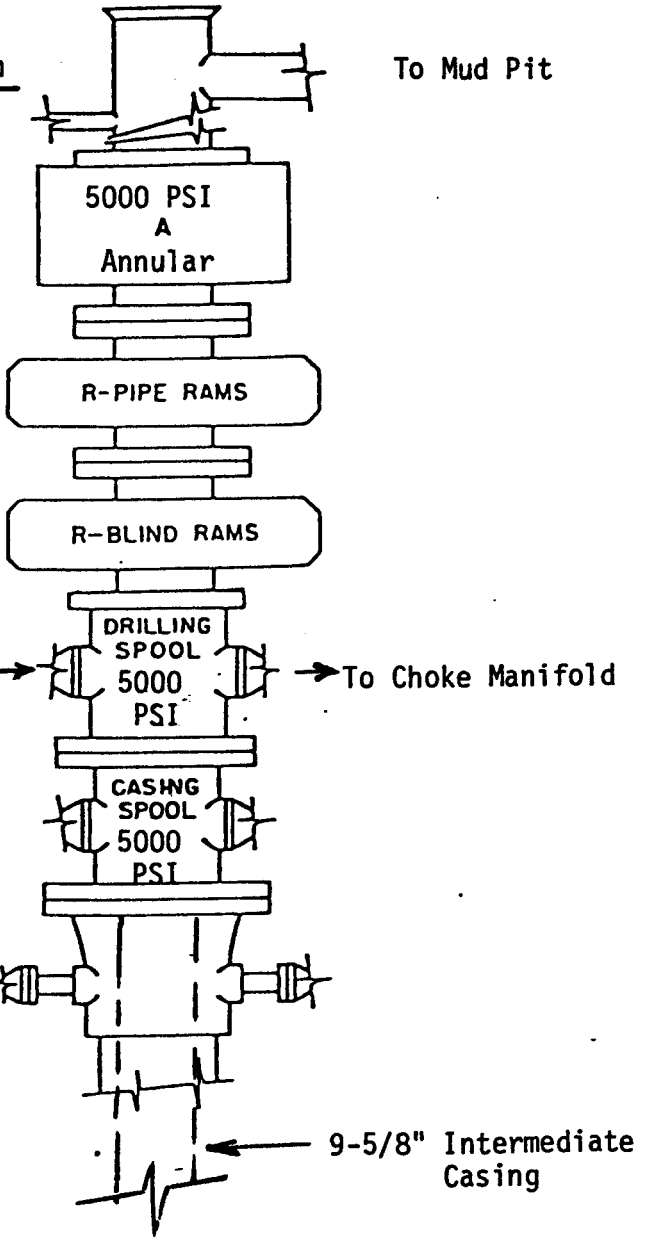
PRESSURE CONTROL SPECIFICATIONS

12" BOP System

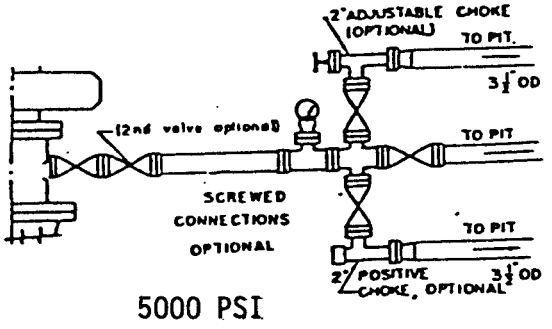


Hydraulic
3000 PSI
Double Gate
BOP

10" BOP System



Hydraulic
5000 PSI
Double Gate
BOP



5000 PSI

CHOKE-MANIFOLD DESIGN

TEST SCHEDULE

12" BOP System & 13-3/8" Casing
to 2500 PSI.

10" BOP System & Choke Manifold
to 5000 PSI.

9-5/8" Casing to 3500 PSI.

Auxiliary Equipment
Lower kelly cock, full opening
stabbing valve, and mud monitoring
system including pit level indicators
and/or flow sensor with alarms.

Personnel & Mailing Information:

Dee E. Beardsley, Manager of Operations
Pacific Transmission Supply Company
P.O. Box 3093
Casper, Wyoming 82602
Telephone: Office (307) 265-1027
Home (307) 234-7666

E. E. Mulholland, Operations Engineer
Pacific Transmission Supply Company
P.O. Box 3093
Casper, Wyoming 82602
Telephone: Office (307) 265-1027
Home (307) 265-4191

R. J. Firth
Pacific Transmission Supply Company
85 South 200 East
Vernal, Utah 84078
Telephone: Office (801) 789-4573
Home (801) 789-5575

Notification of Shows, DST's and Unusual Problems:

Dee E. Beardsley	Office:	307-265-1027	Home:	307-234-7666
J. L. Wroble		303-571-1662		303-770-2667
E. E. Mulholland		307-265-1027		307-265-4191
R. J. Firth		801-789-4573		801-789-5575

Distribution of Information:

Pacific Transmission Supply Company
P.O. Box 3093
Casper, Wyoming 82602
Attn: Mr. D. E. Beardsley

Pacific Transmission Supply Company
717 Seventeenth Street, Suite 2300
Denver, Colorado 80202
Attn: Mr. J. L. Wroble

State of Utah
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116
Attn: Chief Petroleum Engineer

Pacific Transmission Supply Company
85 South 200 East
Vernal, Utah 84078
Attn: Mr. R. J. Firth

United States Geological Survey
Conservation Division
Branch of Oil and Gas
8440 Federal Bldg.
125 South State Street
Salt Lake City, Utah 84138
Attn: Mr. E. W. Guynn

** FILE NOTATIONS **

DATE: Sept 27, 1979 NGC

Operator: ~~Pacific Transmission Supply Co~~

Well No: Federal 4-4

Location: Sec. 4 T. 10S R. 23E County: Uintah

File Prepared: ✓ Entered on N.I.D.: ✓

Card Indexed: ✓ Completion Sheet: ✓

✓ API Number 43-047-30632

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: OK w/order NW¼ or SE¼

APPROVAL LETTER:

Bond Required: ____ Survey Plat Required: ____

Order No. 179-1 10/24/78 O.K. Rule C-3 ____

Rule C-3(c), Topographic Exception/company owns or controls acreage within a 660' radius of proposed site ____

#3

Lease Designation Fed Plotted on Map ✓

Approval Letter Written ✓

ltrm

pl

September 28, 1979

Pacific Transmission Supply Co.
P.O. Box 3093
Casper, Wyoming 82602

Re: Well No. Federal 4-4, Sec. 4, T. 10S, R. 23E., Uintah County, Utah
Well No. Federal 4-5, Sec. 5, T. 10S, R. 23E., Uintah County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas wells is hereby granted in accordance with the Order issued in Cause No. 179-1 dated October 24, 1978.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify one of the following:

MICHAEL T. MINDER
Geological Engineer
Office: 533-5771
Home: 876-3001

FRANK M. HAMNER
Chief Petroleum Engineer
Office: 533-5771
Home: 531-7827

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (acquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API numbers assigned to these wells are #4-4 - 43-047-30632; #4-5 - 43-047-30633.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Geological Engineer

/btm

cc: USGS

Submit in Triplicate

Rule 30 CFR 221.20 requires well shall not be drilled closer than 200 ft. from the lease boundary or 200 ft. from any legal sub-division without adequate reasons or consent.

District Oil and Gas Engineer
U. S. Geological Survey
Conservation Division
8440 Federal Building
Salt Lake City, Utah 84138

Re: Stipulation

Dear Sir:

Federal 4-4

PACIFIC TRANSMISSION SUPPLY COMPANY is the owner of U. S. Oil and Gas Lease U33433, and proposes to drill a well on the leased premises to test for oil and gas at a location in the ¼ NW¼ SE¼ Section 4, T. 10S, R. 23E, SLB&M Mer., Uintah County, State of Utah, 1613' from South line and 1329' from East line of Section 4.

Section 221.20 of the Federal Oil and Gas Regulations requires that no well be drilled less than 200' from the boundary of any legal subdivision without the written consent of the Supervisor, United States Geological Survey. The proposed location is approximately 9 feet from the East boundary line of the NW ¼ SE ¼ of Section 4, but is considered to be [illegible]y because of an order issued by the Board of Oil, Gas and Mining, State of Utah, dated 10-24-78 and identified as Cause No. 179-1 requires [illegible] be located at or near the center of the SE¼ or NW¼ of each [illegible]on within the subject spaced area.

Therefore, Pacific Transmission Supply Co., Lessee, requests the consent of the Supervisor to the drilling of the proposed well at the above-described location. In consideration of such consent, PTS, Lessee, hereby expressly covenants and agrees that he will make no separate assignments of the NW ¼ SE ¼ and the NE ¼ SE ¼, Section 4, T. 10S, R. 23E, Mer., and that he will keep the two described subdivisions under joint assignment until the above-mentioned well has been plugged and abandoned with the approval of the Supervisor.

Very truly yours,

E. E. MULHOLLAND
Operations Engineer

bcc: RJFirth
State of Utah

Form 9-331 C
(May 1963)

SUBMIT IN DUPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DUPLICATE COPY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Pacific Transmission Supply Company

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14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 58 miles southeast of Vernal, Utah

12. COUNTY OR PARISH: Uintah — 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1329'	1820	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
	8800'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5316' Ungraded ground, 5330' KB estimated

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RECEIVED
FEB 11 1980
DIVISION OF
OIL, GAS & MINING

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24.

SIGNED R. J. Firth — TITLE Petroleum Engineer — DATE Sept. 24, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SGD.) E. W. GUYNN — TITLE DISTRICT ENGINEER — DATE FEB 08 1980

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-Div.of OG&M,SLC,UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-File

NOTICE OF APPROVAL

Ut. State O+G

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

U. S. GEOLOGICAL SURVEY - CONSERVATION DIVISION

FROM: : DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT LEASE NO. U 3154 33

OPERATOR: Pacific Transmission Supply WELL NO. 21-4

LOCATION: ¼ NW ¼ SE ¼ sec. 4, T. 11S, R. 23E, SLM

Uintah County, Utah

1. **Stratigraphy:** Uintah - surface
Green River ~840
Wasatch ~4130
Mesaverde ~6130
Castlegate ~8450
TD ~8800

2. **Fresh Water:** possible in Uintah Fm. Usable water at about 960' to 1000'.
Good water at about ~~2000~~ 2300 to 2500' ~~possible also~~

3. **Leasable Minerals:**
Oil shale - mahogany zone at about 2080 ft

4. **Additional Logs Needed:** adequate

5. **Potential Geologic Hazards:** slight overpressuring in lower Wasatch or Mesaverde to about 0.52 psi/ft

6. **References and Remarks:**
B 1394-L PP 584

Signature: _____ Date: 10 - 24 - 79

Oil and Gas Drilling EA #609-79

United States Department of the Interior
Geological Survey
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No.: U-33433

Operator: Pacific Transmission Supply Company Well No.:4-4

Location: 1613' FSL & 1329' FEL Sec.: 4 T.: 10S. R.: 23E.

County: Uintah State: Utah Field: Wildcat

Status: Surface Ownership: Public Minerals: Federal

Joint Field Inspection Date: October 18, 1979

Participants and Organizations:

Greg Darlington	USGS-Vernal
Ron Rogers	BLM-Vernal
Ron Dettloffson	Pacific Transmission Supply
Red Case	Ross Construction

Related Environmental Analyses and References:

(1) Unit Resource Analysis, Bonanza Planning Unit, BLM, Vernal.

Analysis Prepared by: Greg Darlington
Environmental Scientist
Vernal, Utah

Reviewed by: George Diwachak
Environmental Scientist
Salt Lake City, Utah

Date: October 22, 1979

Noted - G. Diwachak

Proposed Action:

On September 28, 1979, Pacific Transmission Supply Company filed an Application for Permit to Drill the No. 4-4 exploratory well, an 8800 ft. gas test of the Mesa Verde formation; located at an elevation of 5316 ft. in the NW¼ SE¼ Section 4, T. 10S., R. 23 E. on Federal mineral lands and Public surface; lease No. U-33433.

There was no objection raised to the wellsite. Since an objection was raised to the access road, it was modified to use an existing low water crossing. The existing road would be rerouted around the pad to permit access. Rerouting would utilize the existing low water crossing to eliminate the need for culvert installation.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface Plan are on file in the USGS District Office in Salt Lake City, Utah and the USGS Northern Rocky Mountain Area Office in Casper, Wyoming. The 13-Point Surface Protection Plan is on file in the District Office in Salt Lake City.

A working agreement has been reached with the BLM, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 160 ft. wide x 300 ft. long and a contoured reserve pit approximately 100 ft. x 150 ft. A rerouting of the access road around the pad would necessitate a new access road construction of about 18 feet wide by 300 feet long and a berm would be built around the West and South of the pad to facilitate the handling of existing runoff from a maintained road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, plans for a gas flow line would be submitted to the appropriate agencies for approval. The anticipated starting date is upon approval and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drill site is approximately 58 miles Southeast of Vernal, Utah, the nearest town. A fair road runs to the location. This well is an exploratory well.

Topography:

The location is on a hillside with a gentle slope and small rock outcrops to the West of the pad.

Geology:

The surface geology is the Green River Formation.

The soil is a sandy clay with sandstone and shale rocks and gravels.

No geologic hazards are known near the drillsite.

Seismic risk for the area is moderate. Anticipated geologic tops are filed with the 10Point Subsurface Protection Plan.

A 9 5/8", 36.0#, K-55 intermediate casing will be run and cemented to protect the oil shale section of the Green River Formation. All water flows and significant hydrocarbon shows will be evaluated and reported.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist and is possible in the sandstone units of the Mesa Verfe. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep in to the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to

aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 1.6 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rain fall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium and gusty, occuring predominately from West to East. Air mass inversions are rare. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

The location drains through a large nonperrennial drainage near the pad to the White River about 2 ½ miles distance from the proposed pad (to the South of the pad). The White River is a tributary of the Green River.

A berm would be built for drainage diversion to alleviate existing runoff problems on the proposed pad.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

Sagebrush, shad scale and native grasses predominate at the location. Other plants in the area are of the salt-desert-shrub types.

Proposed action would remove about 1.6 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

The fauna of the area consists predominantly of mule deer, antelope, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

An animal and plant inventory has been made by the BLM. No endangered plants or animals are known to inhabit the project area.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would

then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

The economic effect on one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Uintah County.

But should this well discover a significant new hydrocarbon source, local, state, and possible national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Bonanza Planning Unit. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserves pits would contain all fluids used during the

drilling operations. A trash cage would be utilized for any solid wastes generated at the site and would be suitably removed at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:

(1) Not approving the proposed permit-The oil and gas lease grants the lessee exclusive right to drill for, mine, extract, remove and dispose of all oil and gas deposits. Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

(2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

(3) Drilling should be allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator.

A. The reserve pits would be contoured to allow the proposed access road to use the existing low water crossing before being rerouted around the pad. This would be the best place for a culvert if one is installed, however at the onsite it was thought that a low water crossing would probably be sufficient.

B. A berm would be built around the South and West sides of the pad to alleviate drainage problems. This berm is indicated as a drainage diversion on the layout diagram but not mentioned elsewhere in the APD.

Adverse Environmental Effects Which Cannot Be Avoid:

Surface disturbance and removal of vegetation from approximately 1.6 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be

eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, gas leaks, and spills of oil and water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable committment of resources would be made. Erosion from the site would eventually be carried as sediment in the White River. The potential for pollution to the White River would exist through leaks and spills.

Determination:

This requested action does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Section 102 (2) (C).

11/21/79
Date

District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

PACIFIC TRANSMISSION SUPPLY COMPANY

13 Point Surface Use Plan

For

Well Location

P.T.S. #4-4 Federal

Section 4, T10S, R23E, S.L.B.& M.

Uintah County, Utah

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4
Section 4, T10S, R23E, S.L.B.& M.

1. EXISTING ROADS

See attached Topographic Map "A". To reach Pacific Transmission Supply Company well location, P.T.S. #4-4 Federal, located in the NW¼ SE¼ Section 4, T10S, R23E, S.L.B.& M., from Vernal, Utah;

Proceed East out of Vernal, Utah, on U.S. Highway 40 - 24 miles to its junction with Utah State Highway 45 to the South; proceed Southerly along this road 22 miles to Bonanza, Utah; proceed Westerly from Bonanza, on an improved dirt road 4.3 miles to its junction with a road to the Southwest; proceed Southwesterly along this road 7.3 miles to the proposed location site.

The highways mentioned above are bituminous surfaced roads to Bonanza, Utah, at which point the roads are dirt and are constructed of materials acquired during construction of the roads. This material consists of a sandy clay material with some fine gravels.

There is no anticipated construction on any portion of the above described roads. They will meet the necessary standards required to facilitate an orderly flow of traffic during the drilling phase, completion phase, and the production phase of this well at such time that production is established.

The roads that are required for access during the drilling phase, completion phase, and production phase of this well, will be maintained at the standards required by the B.L.M. or other controlling agencies.

2. PLANNED ACCESS ROAD

See Topographic Map "B" and the Location Layout Sheet.

There is no planned access road required for this location site. The existing road described in Item #1 will facilitate the anticipated traffic flow necessary during the drilling, completion, and production phases of this well, if production is established. However, the existing road described in Item #1 will need to be rerouted around the proposed location site as shown on the Location Layout Sheet.

In order to facilitate tha anticipated traffic flow necessary to drill and produce this well, the existing road to be re-routed will meet the following standards;

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4
Section 4, T10S, R23E, S.L.B.& M.

2. PLANNED ACCESS ROAD - Continued

The proposed road will be an 18' crown road (9' either side of the centerline) with drain ditches along either side of the proposed road where it is determined necessary in order to handle any run-off from normal meterological conditions that are prevalent to the area.

Back slopes along the cut areas of the road will be 1½ to 1 slopes and terraced.

There will be one culvert required along this access road. (See Location Layout Sheet for the size and location of this culvert). This culvert will be placed acording to the specifications shown in Figures 2 and 3 on page 23 of the Surface Operating Standards For Oil and Gas Exploration and Development Handbook prepared by the U.S. Department of the Interior Bureau of Land Management.

If, at the onsite inspection, it is decided that a dry creek drainage crossing will facilitate the anticipated run-off, one will be constructed according to the specifications shown in Figure 1 on page 22 of the same handbook mentioned above.

The road will be centerline flagged prior to the commencement of construction.

If deemed necessary by the local governmental agencies or their representatives, turnouts will be installed for safety purposes every 0.25 miles or on the top of ridges that will provide the greatest sight distance. These turnouts will be 200' in length and 12' in width and will be tapered from the shoulder of the road for a distance of 50' in length at both the access and the outlet end.

Any fences that are encountered along this access road will be cut and replaced with a cattleguard with a minimum width of 18' and a loading factor large enough to facilitate the heavy trucks required in the drilling and production of this well.

If cattleguards are to be located at existing gates, they will be installed with the above requirements and with a new gate installed at one end of the cattleguard.

The access from the road to the gate will be of such a nature that there will be no impedance of traffic flow along the main access road and no difficulties encountered by traffic utilizing the gate either leaving or entering the proposed access road.

All lands involved in this action are under B.L.M. jurisdiction.

The terrain that is traversed by this road is generally level and is vegetated with sagebrush and grasses.

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4
Section 4, T10S, R23E, S.L.B.& M.

3. LOCATION OF EXISTING WELLS

There are no known water wells, abandoned wells, disposal wells, drilling wells, shut in wells, injection wells, monitoring or observation wells for other resources within a one mile radius of this location site.

There are however, three producing wells located within a one mile radius. (See Topographic Map "B" for the location of these wells in relation to the proposed location site.)

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

There are no Pacific Transmission Supply Company tank batteries, production facilities, oil gathering lines, gas gathering lines, injection lines, or disposal lines within a one mile radius of this location site, although there are gas gathering lines and production facilities in the area that are owned by other companies.

In the event that production is established, all petroleum production facilities will be contained within the proposed location site (see Location Layout Sheet). Plans for a flowline from this location to existing lines in the area will be submitted upon completion of the well. Plans will be submitted to the appropriate agencies upon completion of the survey. The areas used for production facilities will be built using bulldozers, graders, and workman crews to lay lines, and set up equipment.

The rehabilitation of the disturbed area that is not required for the production of this well will meet the requirements of Items #7 and #10 and these requirements and standards will be adhered to.

5. LOCATION AND TYPE OF WATER SUPPLY

Water to be used in the drilling of this well will be hauled by truck from the White River near the Mountain Fuel Bridge in Section 17, T9S, R22E, S.L.B.& M. Water will be hauled over existing roads and the proposed access road approximately 15.7 miles to the proposed location site.

In the event this is not a suitable source an alternate source will be decided upon and all concerned agencies will be notified.

There will be no water well drilled at this location site.

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4 Federal
Section 4, T10S, R23E, S.L.B.& M.

6. SOURCE OF CONSTRUCTION MATERIALS

All construction materials for this location site and access road shall be borrow materials accumulated during the construction of the location site and access road. No additional road gravels or pit lining materials from other sources are anticipated at this time, but if they are required the appropriate actions will be taken to acquire them from private sources.

All surface disturbance is on B.L.M. lands.

7. METHODS FOR HANDLING WASTE DISPOSAL

See location layout sheet.

A reserve pit will be constructed.

The reserve pit will be approximately 8' deep and at least one half of this depth shall be below the surface of the existing ground.

One half of the reserve pit will be used as a fresh water storage area during the drilling of this well and the other one half will be used to store non-flammable materials such as cuttings, salts, drilling fluids, chemicals, and produced fluids, etc.

If deemed necessary by the agencies concerned to prevent contamination to surrounding areas, the reserve pits will be lined with a gel.

The pits will have wire and overhead flagging installed if deemed necessary to protect water fowl, wildlife, and domestic animals.

At the onset of drilling, the reserve pit will be fenced on three sides and at the time drilling activities are completed, it will be fenced on the fourth side and allowed to dry completely prior to the time that backfilling and other reclamation activities are attempted.

When the reserve pit dries and reclamation activities commence, the pits will be covered with a minimum of four feet of soil and all requirements in Item #10 will be followed.

All waste materials will be contained in a trash basket made of small mesh wire and will be hauled to the nearest sanitary landfill upon completion of the well.

A portable chemical toilet will be supplied for human waste.

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4 Federal
Section 4, T10S, R23E, S.L.B.& M.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen.

9. WELL SITE LAYOUT

See location layout sheet.

The B.L.M. District Manager shall be notified before any construction begins on the proposed location site.

As mentioned in Item #7, the pits will be unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and would cause contamination to the surrounding area. Then the pits will be lined with a gel and any other type material necessary to make it safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil on the location site, all topsoil shall be stripped and stockpiled. (See Location Layout Sheet) When all drilling and production activities have been completed, the location site and access road will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the trash pits shall be buried with a minimum of 5' of cover.

As mentioned in Item #7, the reserve pits will be completely fenced and wired and overhead flagging installed if there is oil in the pits, and then allowed to dry completely before covering.

Restoration activities shall begin within 90 days after completion of the well. Once completion activities have begun, they shall be completed within 30 days.

When restoration activities have been completed, the location site and access ramp shall be reseeded with a seed mixture recommended by the B.L.M. District Manager when the moisture content of the soil is adequate for germination. The Lessee further covenants and agrees that all of said cleanup and restoration activities shall be done and performed in a diligent and most workmanlike manner and in strict conformity with the above mentioned Items #7 and #10.

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4 Federal
Section 4, T10S, R23E, S.L.B.& M.

11. OTHER INFORMATION

The Topography of the General Area (See Topographic Map "A").

The area is a basin formed by the Blue Mountain Plateau and Green River to the North and White River and Roan Plateau to the South.

The basin floor is interlaced with numerous canyons and ridges formed by the non-perennial streams of the area. The sides of these canyons are steep and ledges formed in sandstone, conglomerate, and shale deposits are common to the area.

The geologic structures of the area that are visible are of the Uinta Formation (Eocene Epoch) Tertiary Period in the upper elevations and the cobblestone and younger Alluvial deposits from the Quanternary Period.

Outcrops of sandstone ledges, conglomerate deposits and shale are common in the area.

The topsoil in the area ranges from light brownish-gray sandy clay (SM-ML) type soil with poorly graded gravels to clayey (OL) type soil.

The majority of the numerous washes and streams in the area are of a non-perennial nature flowing during the early spring run-off and heavy rain storms of long duration which are extremely rare as the normal annual rainfall in the area is only 8".

The White River to the South of this location is the only perennial stream in the area that is affected by this location site.

Due to the low precipitation average, climatic conditions and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid regions and consists of areas of sagebrush, rabbitbrush, some grasses and cacti as the primary flora. This is also true for the lower elevations.

The fauna of the area consists predominantly of the mule deer, coyotes, pronghorn antelope, rabbits and varieties of small ground squirrels and other types of rodents. The area is used by man for the primary purpose of grazing domestic sheep and cattle.

The birds of the area are raptors, finches, ground sparrows, magpies, crows and jays.

The Topography of the Immediate Area (Topographic Map "B").

P.T.S. #4-4 Federal is located on a relatively flat area approximately 2.5 miles North of the White River.

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #4-4 Federal
Section 4, T10S, R23E, S.L.B.& M.

11. OTHER INFORMATION - Continued

The majority of the drainages in the area around this location are non-perennial drainages and drain in a Southerly direction into the White River.

The terrain in the vicinity of the proposed location site is predominantly sagebrush and grasses. There are no occupied dwellings or other facilities of this nature in the general area. There are no visible archaeological, historical, or cultural sites within any reasonable proximity of the proposed location site.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

R.J. Firth
80 South 1500 East
Vernal, Utah 84078

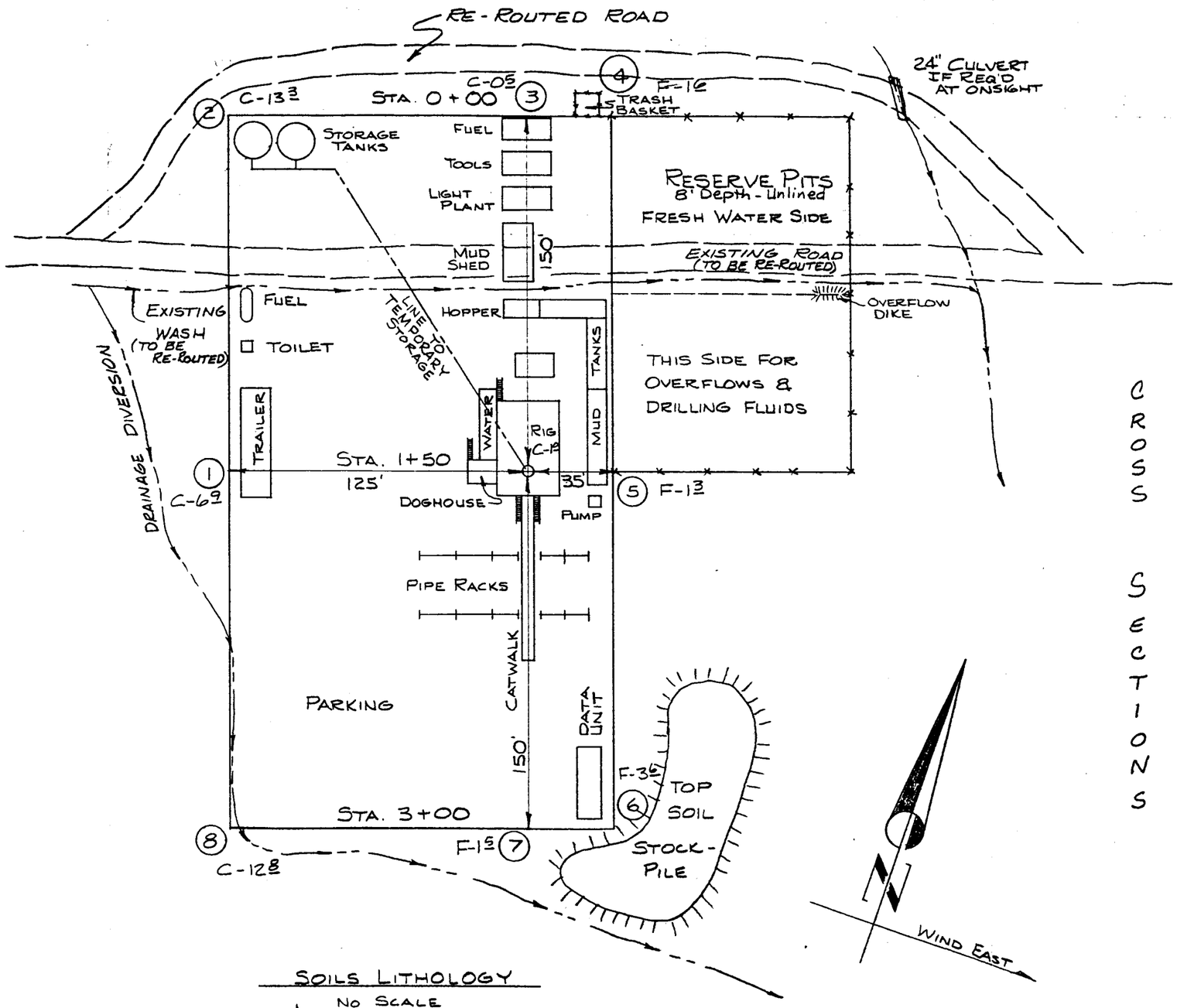
Telephone: 789-4573

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; that the work associated with the operations proposed herein will be performed by Pacific Transmission Supply Company and its contractors and sub-contractors in conformity with this plan and terms and conditions under which it is approved.

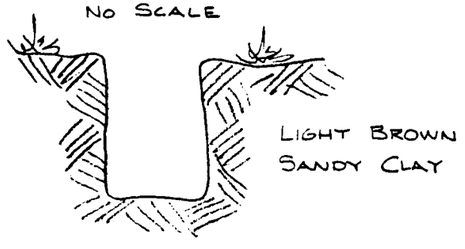
9/24/79
Date

R.J. Firth
Petroleum Engineer



SOILS LITHOLOGY

NO SCALE

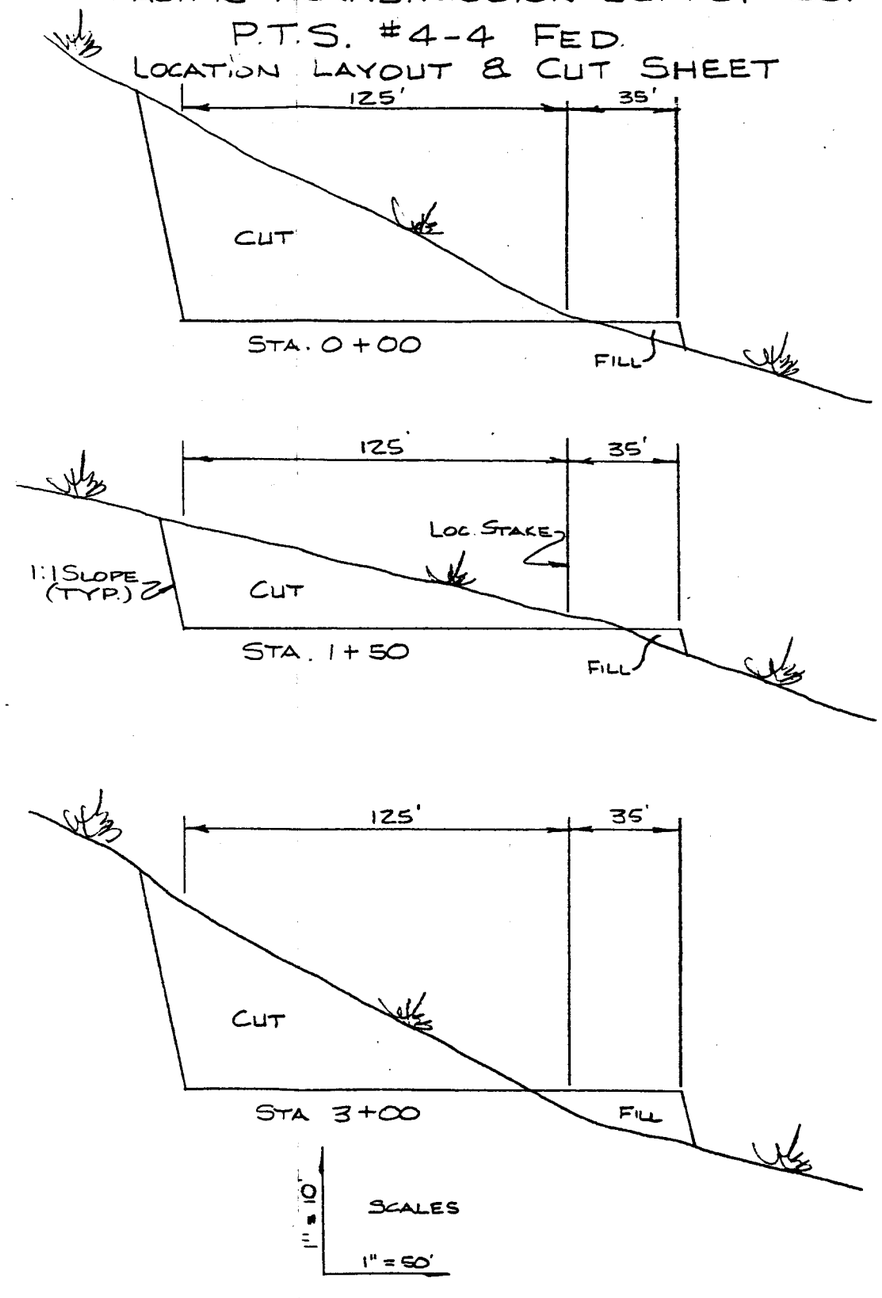


CROSS SECTIONS

PACIFIC TRANSMISSION SUPPLY CO.

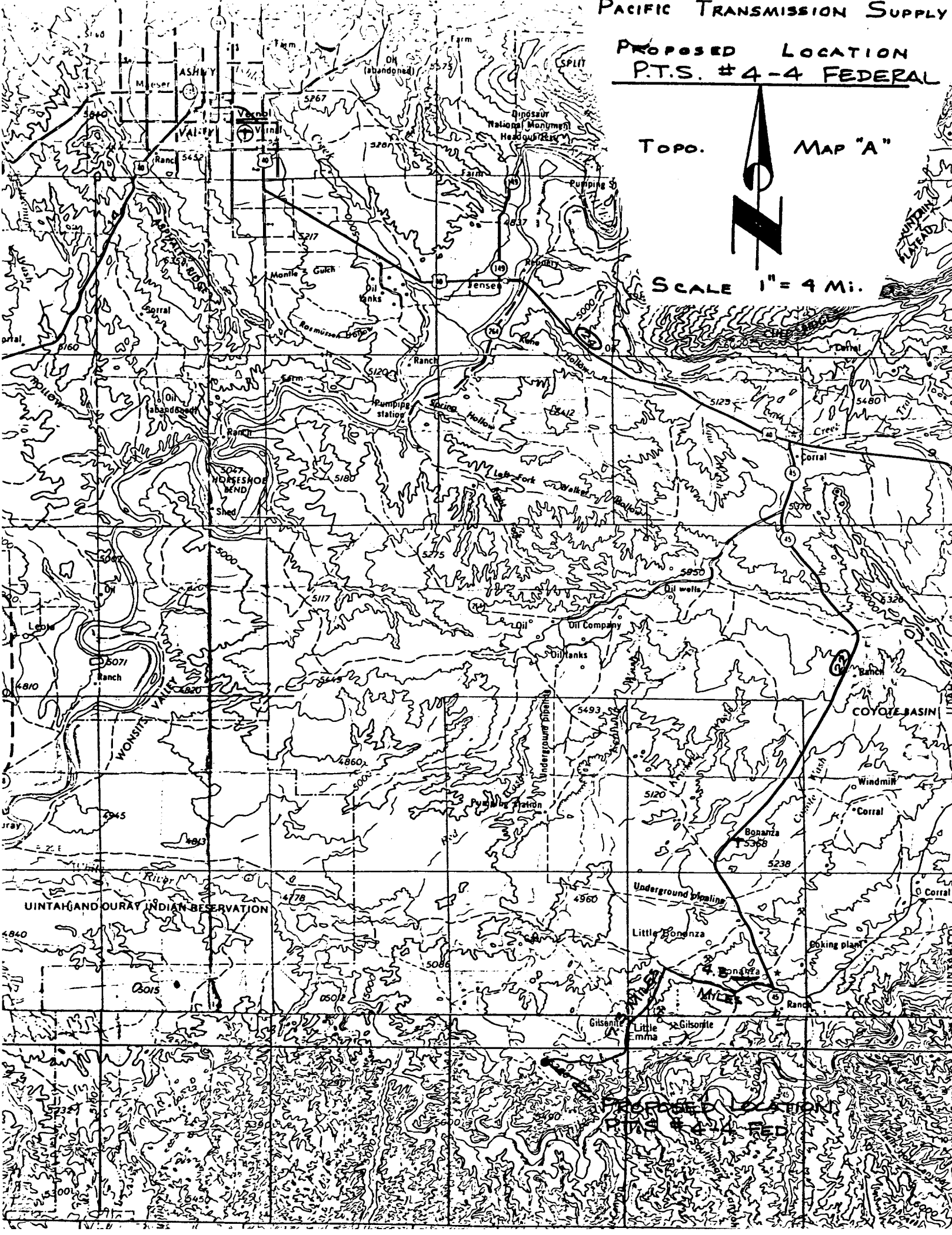
P.T.S. #4-4 FED.

LOCATION LAYOUT & CUT SHEET



APPROX. YARDAGES

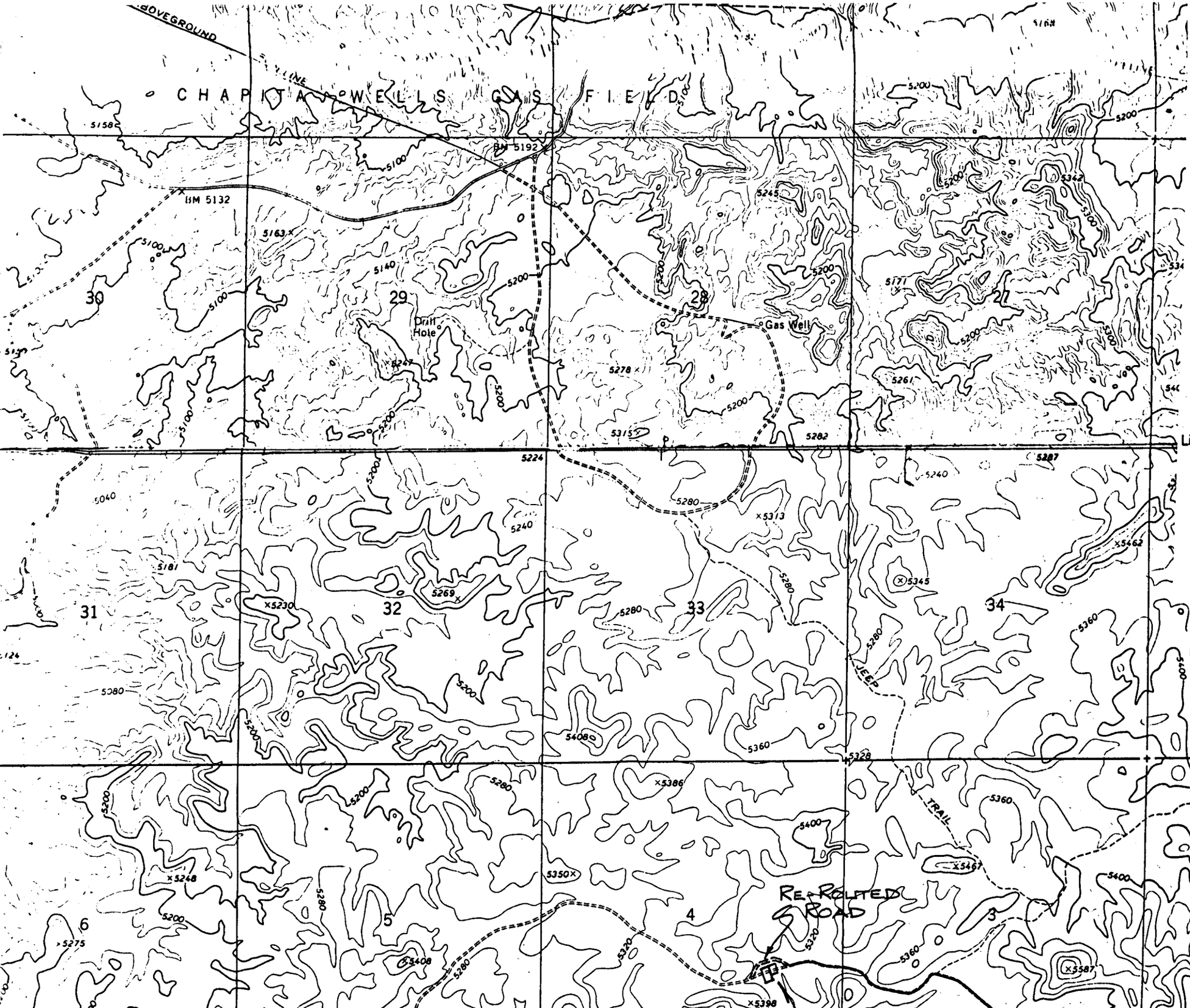
CUT	7,840 Cu.Yds.
FILL	418 Cu Yds.


PACIFIC TRANSMISSION SUPPLY
PROPOSED LOCATION
P.T.S. #4-4 FEDERAL
TOPO. MAP "A"
SCALE 1" = 4 Mi.
PROPOSED LOCATION
P.T.S. #4-4 FED.
ASHLEY
Vernal
Dinosaur National Monument Headquarters
Jensen
Pumping station
Oil tanks
Oil wells
Oil Company
Corral
Ranch
Windmill
Bonanza
Little Bonanza
Coking plant
Gilsonite
Little Emma
MYLES
COYOTE BASIN
WONSITS VALLEY
UINTAH AND OURAY INDIAN RESERVATION
Underground pipeline
Pumping station
Rasmussen Draw
Horseshoe Bend
Left Fork Walker Hollow
Spring Hollow
Ashley Valley Ridge
Uintah River

PACIFIC TRANSMISSION SUPPLY

PROPOSED LOCATION

P.T.S. #4-4 FEDERAL

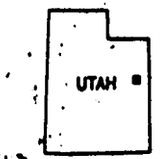


TOPO. MAP "B"

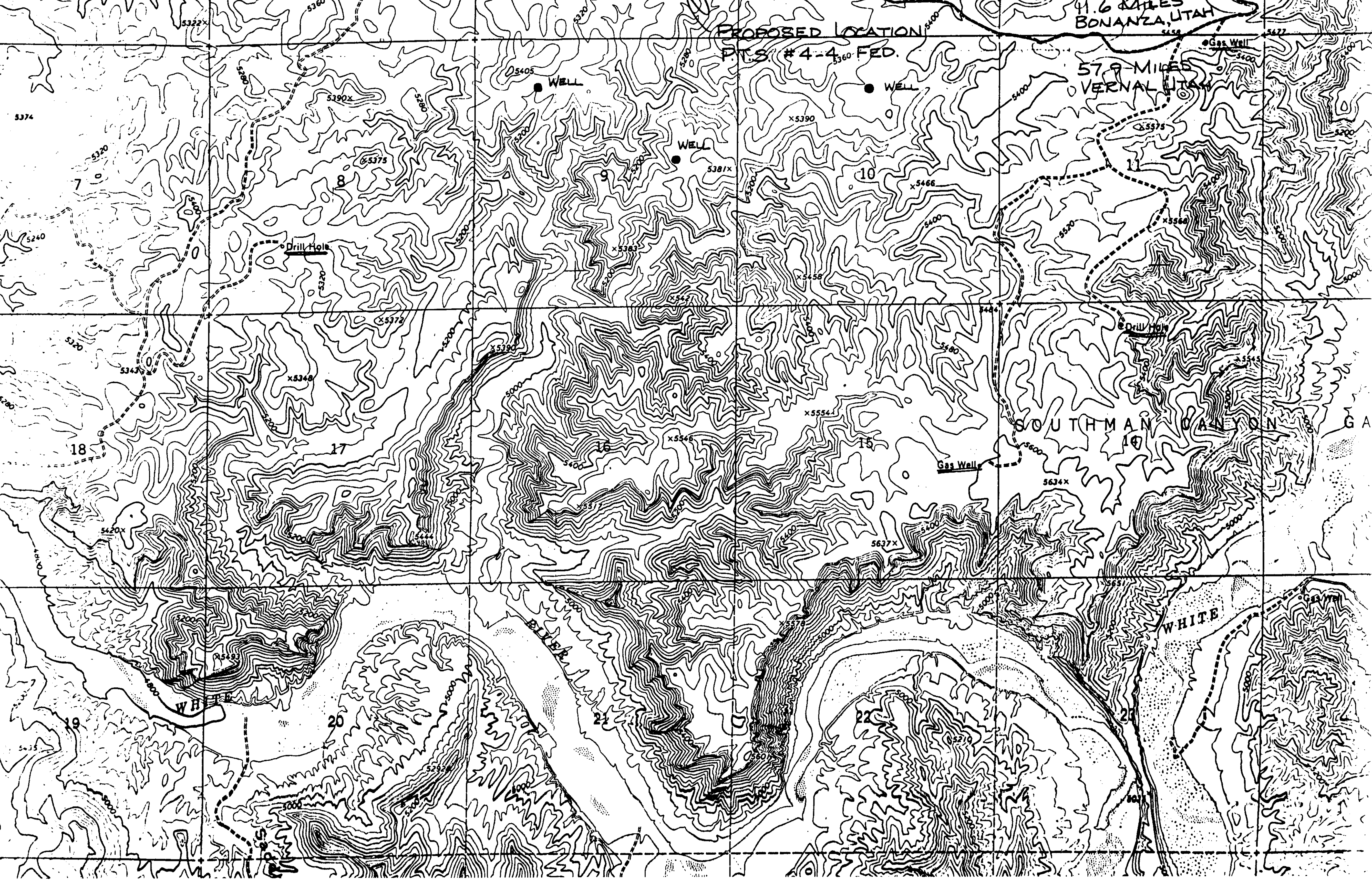
SCALE 1" = 2000'

ROAD CLASSIFICATION

Light-duty ——— Unimproved dirt - - - - - -



QUADRANGLE LOCATION



11.6 MILES
BONANZA, UTAH
PROPOSED LOCATION
P.T.S. #4-4 FED.
57.9 MILES
VERNAL, UTAH
WELL
WELL
WELL
Drill Hole
Drill Hole
Gas Well
Gas Well
Gas Well
SOUTHMAN CANYON GA
WHITE
RIVER
WHITE
7
8
9
10
11
18
17
16
15
14
19
20
21
22
23

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DUPLICATE

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: U33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Federal

2. NAME OF OPERATOR: Pacific Transmission Supply Company

9. WELL NO.: 4-4

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, Wyo. 82602

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1613' from south line, 1329' from east line,
At proposed prod. zone: NW 1/4 SE 1/4, Section 4, T10S, R23E, S.L.B.&M.
Uintah County, Utah

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 58 miles southeast of Vernal, Utah

12. COUNTY OR PARISH: Uintah | 13. STATE: Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1329'	1820	160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
	8800'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 5316' Ungraded ground, 5330' KB estimated

22. APPROX. DATE WORK WILL START*: Upon receipt of approv

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0	200	250 sacks, Circ. to surface
12-1/4"	9-5/8"	36.0	2500	275 sacks. (1)
7-7/8"	4-1/2"	11.6	8800	(2) As necessary to protect all productive intervals. — 200' above uppermost hydrocarbon zone

Operator proposes to drill well to approximately 8800' to test the Mesaverde formation. 9-5/8", 36.0#, K-55 intermediate casing will be run and cemented to protect the oil shale section of the Green River formation. All water flows and significant hydrocarbon shows will be evaluated and reported. The well will be operated according to the attached well program and all applicable regulations. Adequate BOP equipment will be maintained at all times as indicated in the attached Pressure Control Specifications. If commercial production is encountered, 4-1/2", 11.6#, N-80 production casing will be run and cemented to adequately protect all potentially productive intervals. No abnormal pressures or temperatures or other potential hazards are anticipated.

(1) Stage cementing may be necessary to protect fresh wtr zones from 200' (Surface) to base of Uintah (1000')
(2) Stage cementing may be necessary to protect the Oil Shale Zone & usable water 2300'-2500' (Douglas Crk Aquifer).

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED R. J. Firth TITLE Petroleum Engineer DATE Sept. 24, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE DISTRICT ENGINEER DATE FEB 21 1980

CONDITIONS OF APPROVAL, IF ANY: See Attached Cnty Study —

RECEIVED
FEB 08 1980
DIVISION OF
OIL, GAS & MINING

3-USGS,SLC,UT; 1-Div.of OG&M,SLC,UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-File

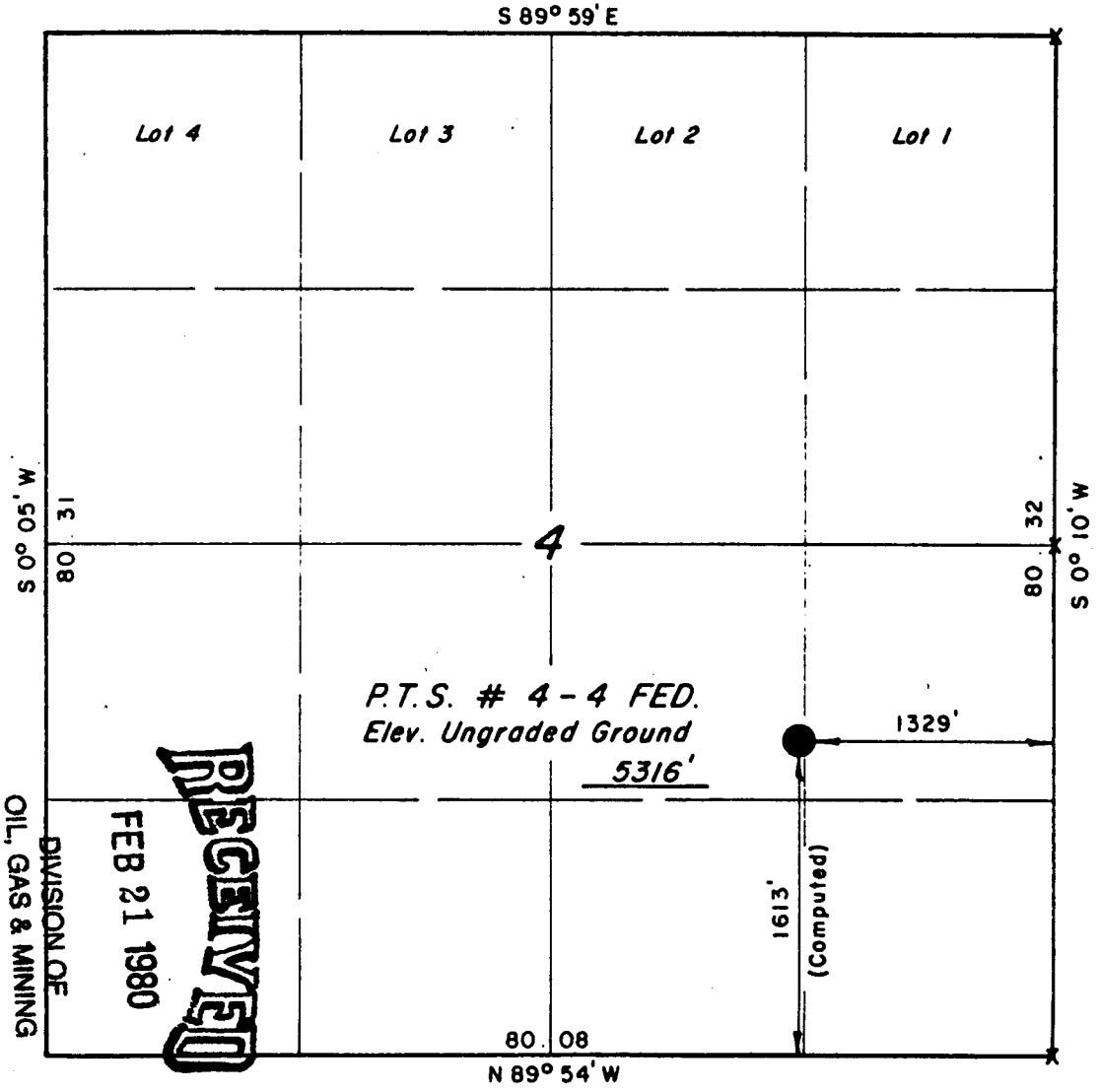
NOTICE OF APPROVAL

*See Instructions On Reverse Side

FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

Operator CONDITIONS OF APPROVAL ATTACHED

T 10 S, R 23 E, S.L.B.&M.



X = Section Corners Located

RECEIVED
FEB 21 1980
DIVISION OF
OIL, GAS & MINING

PROJECT

PACIFIC TRANSMISSION SUPPLY COMPANY

Well location, *P.T.S. # 4-4 Fed.*
located as shown in the NW 1/4 SE 1/4
Section 4, T10S, R 23 E, S.L.B.& M.
Uintah County, Utah.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q — 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 9 - 20 - 79
PARTY G.S. J.S. B.F.W.	REFERENCES G.L.O. Plat
WEATHER	FILE

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Company Pacific Transmission Supply Sompany Well No. 4-4

Location Section 4-T10S-R23E Lease No. U-33433

A COPY OF THESE CONDITIONS SHOULD BE FURNISHED YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (30 CFR 221), and the approved plan of operations. The operator is considered fully responsible for the actions of his subcontractors. The following items are emphasized:

1. There shall be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 30 CFR 221.22. Any changes in operations must have prior approval of this office. Pressure tests are required before drilling out from under all casing strings set and cemented in place. Blowout preventer controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. All BOP pressure tests must be recorded on the daily drilling report.

2. All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and furnished this office for analysis. All oil and gas shows will be adequately tested for commercial possibilities, reported, and protected.

3. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of this office. If operations are to be suspended for more than 30 days, prior approval of this office must be obtained and notification given before resumption of operations.

   In the event abandonment of the hole is desired, an oral request may be granted by this office but must be timely followed within 15 days with a "Notice of Intention to Abandon" (Form 9-331). Unless the plugging is to take place immediately upon receipt of oral approval, the District Engineer must be notified at least 48 hours in advance of the plugging of the well, in order that a representative may witness plugging operation. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form 9-331) must be submitted within 15 days after the actual plugging of the well bore, reporting where the plugs were placed, and the current status of the surface restoration. If surface restoration has not been completed at that time, a

follow-up report on form 9-331 should be filed when all surface restoration work has been completed and the location is considered ready for final inspection.

4. The spud date will be reported orally to the District Engineer within 48 hours after spudding. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report.

   Periodic drilling progress reports must be filed directly with the District Engineer's office on a frequency and form or method as may be acceptable to the District Engineer.

   In accordance with NTL-1, this well must be reported on Form 9-329 "Monthly Report of Operations," starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report should be filed in duplicate directly with the U.S. Geological Survey Area Office, P.O. Box 2859, Casper, Wyoming 82602.

   Any change in the program must be approved by the District Engineer. "Sundry Notices and Reports on Wells" (form 9-331) must be filed for all changes of plans and other operations in accordance with 30 CFR 221.58. Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground will require the filing of a suitable plan pursuant to NTL-6 and prior approval by the District Engineer.

5. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (form 9-330) will be submitted not later than 15 days after completion of the well or after completion of operations being performed, in accordance with 30 CFR 221.59. Two copies of all logs run, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 9-330. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by this office.

6. Significant surface values (are) (~~are not~~) involved at this location. Accordingly, you (must) (~~need not~~) notify ~~this office and~~ the Surface Management Agency at least 24 hours prior to commencing field operations to allow ~~this office and/or~~ the Surface Management Agency office to have personnel present for consultation during the construction of roads and locations.

The Surface Management Agency contact is: Ron Rogers
Office Phone: 789-1362, Home Phone:
City: Vernal, State: Utah

The U.S. Geological Survey District Office address and contacts are:

Address: 2000 Administration Building, 1745 West 1700 South, S.L.C., UT 84104
Office Phone (801) 524-4590

District Engineer	E. W. Guynn	Home Phone:	582-7042
Asst. Dist. Engineer	W. P. Martens	Home Phone:	466-2780
Asst. Dist. Engineer	R. A. Henricks	Home Phone:	484-2294

Unless otherwise specified herein, construction and maintenance of surface facilities approved under this plan shall be in accordance with the guidelines set forth in the BLM/FS/GS Oil and Gas Brochure entitled, "Surface Operating Standards for Oil and Gas Exploration and Development." This includes but is not limited to such items as road construction and maintenance, handling of top soil, and rehabilitation.

8. If a replacement rig is contemplated for completion operations, a "Sundry Notice" to that effect must be filed for prior approval of the District Engineer, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

9. Pursuant to NTL-2B requirements regarding disposal facilities for new wells, this is authorization for unlined pit disposal of the water produced from this well for a period of 90 days from the date of initial production for sales purposes. During this period, an application for approval of the permanent disposal method, along with the required water analysis and other information must be submitted for the District Engineer's approval. Failure to timely file an application within the time allowed will be considered an incident of noncompliance, and will be grounds for issuing a shut-in order until the application is submitted.

10. This application is valid for a period of one year from the date of approval. No extensions will be considered. If the application terminates, any surface disturbance created under the application must be rehabilitated in accordance with the approved plan. After termination, future operations will require a new application be filed for approval.

11. If a tank battery is constructed on this lease, it must be surrounded by a fire wall of sufficient capacity to adequately contain the storage capacity of the battery.

12. _____

_____

_____

SUPPLEMENTAL STIPULATIONS OF APPROVAL CONTINUED

Pacific Transmission Supply
Well No. 4-4
Sec. 4-10S-23E
Uintah County, Utah
Lease No. U-33433

Supplemental Stipulations:

1. Construction and maintenance of roads, rehabilitation of disturbed areas, and construction of pipeline routes, will be in accordance with surface use standards as set forth in the brochure, "Surface Operating Standards for Oil and Gas Exploration Development".

2. Topsoil will be stockpiled as addressed in the applicant's 13 Point Plan. The top 6 to 8 inches of soil materials will be stockpiled at the site.

3. The BLM must be contacted at least 24 hours prior to any rehabilitation activities. The operator may be informed of any additional needed seeding and restoration requirements.

4. A burn pit will not be constructed. There will be no burning or burying of trash or garbage at the well site. Refuse must be contained and hauled to an approved disposal site.

5. A wire mesh or web type fence will be used around the reserve pit. The Northeast corner of the reserve pit will be rounded off, to allow the proposed access road to use the existing low water crossing before being rerouted around the pad.

6. A berm will be built around the South and West sides of the pad to alleviate drainage problems.

7. Adequate and sufficient electric/radioactive logs will be run to locate and identify the prime oil shale horizons in the mahogany zone of the Green River formation. Cementing program for the 9-5/8" intermediate casing will require circulation of cement to the surface to adequately protect the Green River oil shale section and "Birds Nest" aquifer.

General Cementing Program, Uinta Basin

Two aquifers have been identified in the southeastern Uinta Basin. The Birds Nest aquifer occurs above the Mahogany Zone and is usually associated with the Horsebench sandstone. The aquifer occurs about 400 feet above the Mahogany Zone and the thickness averages about 100 feet near the Federal Oil-Shale Tracts Ua and Ub. The aquifer probably thins toward the northwest and may be less than 50 feet thick in the Natural Buttes area. If the aquifer exists west of Bitter Creek, it is probably less than 200 feet above the Mahogany Zone. Total dissolved solids in water samples range from about 2,000 mg/L to over 4,000 mg/L.

The Douglas Creek aquifer occurs below the Mahogany Zone and is associated with the limestones and sandstones in the Douglas Creek Member of the Green River Formation and the Renegade Tongue of the Wasatch Formation. The aquifer occurs about 400 feet below the Mahogany and the thickness averages about 800 feet near the Federal Oil-Shale Tracts Ua and Ub. In Willow Creek the aquifer is less than 100 feet below the Mahogany Zone. Total dissolved solids in water samples range from about 500 mg/L to 1,000 mg/L. Saline water occurs in the lower part of the Douglas Creek Member or in tongues of the Wasatch Formation which underlie the Douglas Creek aquifer.

A general cementing program to protect both aquifers from contamination from saline waters is outlined below. This generalized program applies to the southeastern Uinta Basin, but may also apply to the southwestern and central Uinta Basin if the aquifers are identified during drilling. Some fresh water may occur in the Uinta Formation but information is not available to evaluate this possibility.

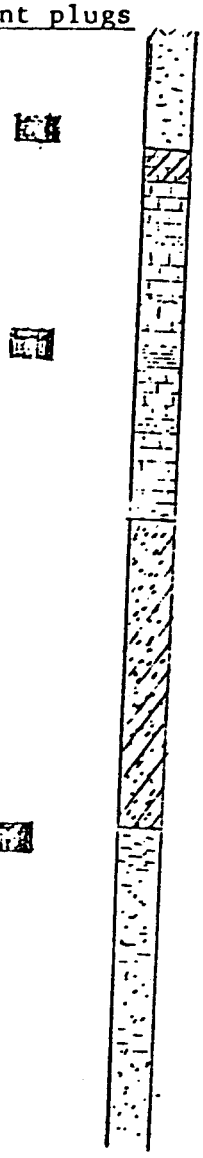
In the diagram below the first cement plug prevents water from leaking upward from the Birds Nest aquifer to the overlying Uinta Formation. The second plug prevents water in the Douglas Creek aquifer from invading the Birds Nest aquifer or vice versa (?) depending on head distributions. The third plug prevents saline water in the underlying formations from leaking into the Douglas Creek aquifer. Lost circulation problems could be encountered in the Birds Nest aquifer and it is probably not feasible to attempt to plug the aquifer itself. Fracturing has been identified in most of the rocks in the area and care should be taken when implementing abandonment procedures. Each case should be treated independently to avoid any leakage through or around plugs.

Prepared by
Walter Holmes,
WRD, SLC
January 15, 1980

Operator - Attchmt.

GENERAL GROUND WATER PROTECTION PROGRAM- UINTA BASIN

ement plugs



Stratigraphic Unit

Uinta Formation

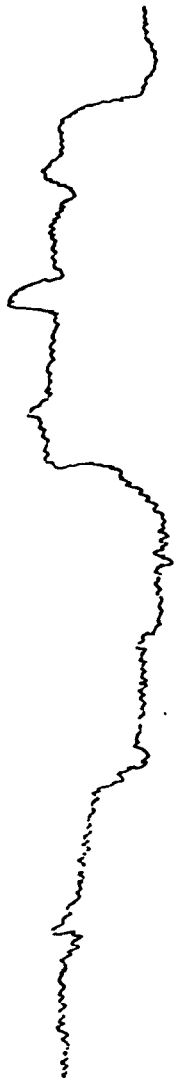
Birds Nest aquifer and top of Green River Formation

Mahogany Oil Shale

Douglas Creek aquifer

Lower Douglas Creek Member or upper Wasatch Formation

Generalized Resistivity Log



increasing resistivity →

Form 9-1123
(Rev. Dec. 1957)

(Submit in triplicate to appropriate
Regional Oil and Gas or Mining Supervisor)

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Salt Lake City, Utah
SERIAL NO.: [redacted]

and hereby designates

NAME: Pacific Transmission Supply Company
ADDRESS: 245 Market Street
San Francisco, California 94105

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 10 South, Range 23 East, SLM
Section 4: All
Section 5: Lots 1-4, S½N½, N½SW¼, SE¼
Containing 1204.92 Acres, m/l
Uintah County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

D R Reese
(Signature of lessee)
Research Exploration Inc
Suite 1322 Metrobank
(Address) Denver Co. 80202

6-11-79
(Date)

U. S. GOVERNMENT PRINTING OFFICE 16—53698-2

Operator

(Submit in Triplicate)

Rule 30, C.F.R. 221.20 requires well shall not be drilled closer than 200 ft. from the lease boundary or 200 ft. from any legal subdivision without adequate reasons or consent.

District Oil and Gas Engineer
U. S. Geological Survey
Conservation Division
8440 Federal Building
Salt Lake City, Utah 84738

Re: Stipulation

Dear Sir:

ENSERCH EXPLORATION, INC. is the owner of U. S. Oil and Gas Lease U-33433, and proposes to drill a well on the leased premises to test for oil and gas at a location in the NW 1/4 SE 1/4, Section 4, Township 10 South, Range 23 East, Meridian, Uintah County, State of Utah, 1613' from South line and 1329' from East line of Section 4.

Section 221.20 of the Federal Oil and Gas Regulations requires that no well be drilled less than 200' from the boundary of any legal subdivision without the written consent of the Supervisor, United States Geological Survey. The proposed location is approximately 9 feet from the East boundary lines of the NW 1/4 SE 1/4 of Section 4, but is considered to be necessary because of an order issued by the Board of Oil, Gas and Mining, State of Utah, dated 10-24-78 and identified as Cause No. 179-1 requires that wells be located at or near the center of the SE 1/4 or NW 1/4 of each section within the subject spaced area.

Therefore, ENSERCH EXPLORATION, INC., Lessee, requests the consent of the Supervisor to the drilling of the proposed well at the above-described location. In consideration of such consent, ENSERCH EXPLORATION, INC., Lessee, hereby expressly covenants and agrees that it will sell no separate assignments of the NW 1/4 SE 1/4 and the NE 1/4 SE 1/4, Section 4, Township 10 South, Range 23 East, Meridian, and that it will keep the two described subdivisions under joint assignment until the above-mentioned well has been plugged and abandoned with the approval of the Supervisor.

Very truly yours,

ENSERCH EXPLORATION, INC.

By: G. T. Abell
G. T. Abell
Senior Land Representative

GTA/nks
cc: Mr. Kent Davis
Pacific Transmission
Supply Company

Submit in Triplicate

Rule 30 CFR 221.20 requires well shall not be drilled closer than 200 ft. from the lease boundary or 200 ft. from any legal sub-division without adequate reasons or consent.

District Oil and Gas Engineer
U. S. Geological Survey
Conservation Division
8440 Federal Building
Salt Lake City, Utah 84138

Re: Stipulation

Dear Sir:

PACIFIC TRANSMISSION SUPPLY COMPANY is the owner of U. S. Oil and Gas Lease U33433, and proposes to drill a well on the leased premises to test for oil and gas at a location in the ¼ NW¼ SE¼ Section 4, T. 10S, R. 23E, SLB&M Mer., Uintah County, State of Utah, 1613' from South line and 1329' from East line of Section 4.

Section 221.20 of the Federal Oil and Gas Regulations requires that no well be drilled less than 200' from the boundary of any legal subdivision without the written consent of the Supervisor, United States Geological Survey. The proposed location is approximately 9 feet from the East boundary line of the NW ¼ SE ¼ of Section 4, but is considered to be necessary because of an order issued by the Board of Oil, Gas and Mining, State of Utah, dated 10-24-78 and identified as Cause No. 179-1 requires that wells be located at or near the center of the SE¼ or NW¼ of each section within the subject spaced area.

Therefore, Pacific Transmission Supply Co., Lessee, requests the consent of the Supervisor to the drilling of the proposed well at the above-described location. In consideration of such consent, PTS, Lessee, hereby expressly covenants and agrees that he will make no separate assignments of the NW ¼ SE ¼ and the NE ¼ SE ¼, Section 4, T. 10S, R. 23E, Mer., and that he will keep the two described subdivisions under joint assignment until the above-mentioned well has been plugged and abandoned with the approval of the Supervisor.

Very truly yours,

E. E. Mulholland

E. E. MULHOLLAND
Operations Engineer

PACIFIC TRANSMISSION SUPPLY COMPANY
Natural Gas Corporation of California

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

March 5, 1980

Mr. E. W. Guynn (3)
GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, UT 84104

Mr. Frank M. Hamner (1)
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Mr. J. Milton Wege (1)
RALPH E. DAVIS & ASSOCIATES
500 Jefferson, Suite 2031
Houston, TX 77002

Mr. R. W. Sharp (1)
ENSERCH EXPLORATION, INC.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Re: PTS #4-4 Federal
NW SE Section 4, T10S, R23E
Uintah County, UT

Gentlemen:

Enclosed are your required number of copies of Form 9-331, Sundry Notices and Reports on Wells, Request for Approval to Alter Casing Setting Depth dated March 5, 1980 for the above referenced well.

Very truly yours,

R. J. Firth
Petroleum Engineer

RJF/kh
Encls.
cc: J. L. Wroble
E. R. Henry
E. E. Mulholland
C. T. Clark (Cover Letter Only)

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR
P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1613' FSL, 1329' FEL, NW SE,
AT TOP PROD. INTERVAL: Section 4, T10S, R23E
AT TOTAL DEPTH:

5. LEASE
U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
4-4

10. FIELD OR WILDCAT NAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 4, T10S, R23E

12. COUNTY OR PARISH
Uintah

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5328' KDB

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	☐	☐
FRACTURE TREAT	☐	☐
SHOOT OR ACIDIZE	☐	☐
REPAIR WELL	☐	☐
PULL OR ALTER CASING	☒	☐
MULTIPLE COMPLETE	☐	☐
CHANGE ZONES	☐	☐
ABANDON*	☐	☐
(other) Alter casing setting depth.		

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Application for Permit to Drill approved February 8, 1980 indicated setting depth of 9-5/8" casing at 2500'. Operator proposes to change 9-5/8" casing setting depth to 2800'. By increasing the casing setting depth and adjusting the cement program, the need for stage cementing the production casing will be eliminated and the necessary zone protection for the oil shale and the aquifer will be obtained.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING
DATE: 3/11/80
BY: M. J. Minder

RECEIVED
MAR 7 1980
DIVISION OF
OIL, GAS & MINING

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE Petroleum Engineer DATE March 5, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: *Pacific Transmission Supply Company*

WELL NAME: *Federal #4-4*

SECTION *4 NW SE* TOWNSHIP *10S* RANGE *23E* COUNTY *Uintah*

DRILLING CONTRACTOR *Ross Drilling*

RIG # *1*

SPUDDED: DATE *3/20/80*

TIME *3:00 p.m.*

HOW *dry hole spudder*

DRILLING WILL COMMENCE *presently*

REPORTED BY *Ron Firth*

TELEPHONE #

DATE *March 26, 1980* SIGNED Original Signed By M. T. Minder

cc: USGS

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Pacific Transmission Supply Company

8. FARM OR LEASE NAME: Federal

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

9. WELL NO.: 4-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE, Section 4, T10S, R23E

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Spudding Operations			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Spudded 17-1/2" surface hole on March 20, 1980. Spudding operations reported to United States Geological Survey, Salt Lake City, Utah on March 26, 1980. Drilled 17-1/2" surface hole to 208'. Ran 6 jts. 13-3/8", 48.0#, H40 surface casing to 208' KBM and cemented with 250 sacks Class G cement. Cement circulated to surface. Job completed March 26, 1980. Waiting on rotary rig availability.

18. I hereby certify that the foregoing is true and correct

SIGNED ORIGINAL SIGNED BY: R. J. FIRTH R. J. Firth TITLE Petroleum Engineer DATE April 3, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

cc: Div. of Oil, Gas & Mining; Ralph E. Davis & Assoc.; Enserch Explo.; J.L.Wroble; E.R. Henry; E.E.Mulholland

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE, Section 4, T10S, R23E

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progress			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

March 31 thru April 6, 1980:

Rig up rotary drilling rig and equipment. Cut off 13-3/8" surface casing and installed casing flange and BOP equipment. Pressure tested BOP equipment. Drilled cement and casing shoe. Drilled out below 13-3/8" surface casing at 8 p.m., April 4, 1980. Drilled 12-1/4" hole 207' - 1532'. Deviation surveys: 3/4° at 423', 3/4° at 701', 1-1/4° at 987', 1-1/4° at 1140' and 1° at 1348'.

RECEIVED
APR 09 1980
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE Petroleum Engineer DATE April 7, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-Div. of OG&M; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-Ralph E. Davis; 1-Enserch Explo.

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progress			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Daily Drilling Progress Report attached.- April 7 thru 13, 1980.
April 14 thru 20, 1980.

RECEIVED
APR 24 1980
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE Petroleum Engineer DATE April 22, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-Div. of OG&M; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-Ralph E. Davis; 1-Enserch Explo.

*See Instructions on Reverse Side

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, UT

4-7-80	TD 1573'. Drilling in Green River. Cemented lost circulation intervals with 100 sacks RFC. WOC.
4-8-80	TD 1573'. Cemented lost circulation intervals with 300 sacks RFC. WOC. Drilling cement 1338'-1525'.
4-9-80	TD 1804'. Drilled cement 1525'-1573'. Drilling in Green River 1573'-1804' with partial and no returns. Cemented lost circulation intervals with 300 sacks RFC. WOC.
4-10-80	TD 1804'. WOC. Cemented lost circulation intervals with 300 sacks RFC. WOC. Drilled cement 1400'-1651'.
4-11-80	TD 1948'. Drilling. Drilled cement 1651'-1750'.
4-12-80	TD 2232'. Drilling.
4-13-80	TD 2616'. Drilling. Deviation: 1-1/4° at 2295'.
4-14-80	TD 2768'. Logging.
4-15-80	TD 2768'. Cementing 9-5/8" casing. Completed logging. Log tops: Green River-Parachute Creek 1324', H-Marker 2612'. Ran 78 jts. 9-5/8" O.D., 36.0# K-55 casing to 2762'.
4-16-80	TD 2768'. WOC. Cemented 9-5/8" casing with 1100 sacks 50-50 Pozmix followed by 100 sacks Class G. Good circulation with cement returns to surface. Set slips and cut off casing. N.U. BOP equipment and pressure tested.
4-17-80	TD 2909'. Drilling. Ran Cement Bond log. Drilled cement 2716'-2763'.
4-18-80	TD 3510'. Drilling. Deviation: 1-1/2° at 3185'.
4-19-80	TD 4169'. Drilling. Deviation: 1-1/2° at 3775'.
4-20-80	TD 4580'. Drilling. Deviation: 1-1/2° at 4234'.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR
Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR
P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface
1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

5. LEASE DESIGNATION AND SERIAL NO.
U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
4-4

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 4, T10S, R23E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5328' KDB

12. COUNTY OR PARISH
Uintah

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progess Reports			X
(Other)	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Daily Drilling Progress Report Attached, April 21 thru 27, 1980.

RECEIVED
MAY 5 1980
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE Petroleum Engineer DATE May 2, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS, SLC, UT; 1-Div. of OG&M; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-Ralph E. Davis; 1-Enserch Explo.

*See Instructions on Reverse Side

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, UT

4-7-80	TD 1573'. Drilling in Green River. Cemented lost circulation intervals with 100 sacks RFC. WOC.
4-8-80	TD 1573'. Cemented lost circulation intervals with 300 sacks RFC. WOC. Drilling cement 1338'-1525'.
4-9-80	TD 1804'. Drilled cement 1525'-1573'. Drilling in Green River 1573'-1804' with partial and no returns. Cemented lost circulation intervals with 300 sacks RFC. WOC.
4-10-80	TD 1804'. WOC. Cemented lost circulation intervals with 300 sacks RFC. WOC. Drilled cement 1400'-1651'.
4-11-80	TD 1948'. Drilling. Drilled cement 1651'-1750'.
4-12-80	TD 2232'. Drilling.
4-13-80	TD 2616'. Drilling. Deviation: 1-1/4° at 2295'.
4-14-80	TD 2768'. Logging.
4-15-80	TD 2768'. Cementing 9-5/8" casing. Completed logging. Log tops: Green River-Parachute Creek 1324', H-Marker 2612'. Ran 78 jts. 9-5/8" O.D., 36.0# K-55 casing to 2762'.
4-16-80	TD 2768'. WOC. Cemented 9-5/8" casing with 1100 sacks 50-50 Pozmix followed by 100 sacks Class G. Good circulation with cement returns to surface. Set slips and cut off casing. N.U. BOP equipment and pressure tested.
4-17-80	TD 2909'. Drilling. Ran Cement Bond log. Drilled cement 2716'-2763'.
4-18-80	TD 3510'. Drilling. Deviation: 1-1/2° at 3185'.
4-19-80	TD 4169'. Drilling. Deviation: 1-1/2° at 3775'.
4-20-80	TD 4580'. Drilling. Deviation: 1-1/2° at 4234'.
4-21-80	TD 4911'. Drilling. Deviation 1° at 4804'.
4-22-80	TD 5055'. Drilling. Deviation 1° at 4905'. Tripped for bit #3. DB: 5046'-53', 350 units gas.
4-23-80	TD 5436'. Drilling.
4-24-80	TD 5749'. Drilling. Deviation: 1-3/4° at 5650'.
4-25-80	TD 5920'. Drilling. Tripped for hole in pipe.
4-26-80	TD 6141'. Drilling. DB: 6076'-95', 770 unit gas.
4-27-80	TD 6237'. Trip for drillstem test. DB: 6185'-6212', 550 units gas.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Pacific Transmission Supply Company

8. FARM OR LEASE NAME: Federal

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

9. WELL NO.: 4-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progress			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Subsequent Report of Drilling Progress dated April 28 thru May 4, 1980.

RECEIVED
MAY 16 1980
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED ORIGINAL SIGNED BY: R. J. FIFTH R. J. Fifth TITLE Petroleum Engineer DATE May 7, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-OG&M,UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-Ralph Davis; 1-Enserch

*See Instructions on Reverse Side

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, Utah

4-28-80	TD 6281'. Drilling. DST no. 1 6187'-6237'. Final gas volume 8.95 MCF/D.
4-29-80	TD 6425'. Drilling. Tripped for hole in drill collars.
4-30-80	TD 6653'. Drilling. DB: 6618'-37' 450 units gas.
5-1-80	TD 6889'. Drilling DB: 6687'-97' 220 units gas, 6713'-18' 230 units gas, 6739'-54' 590 units gas, 6756'-87' 350 units gas and 6821'-33' 650 units gas.
5-2-80	TD 7098'. Drilling. DB: 6939'-50' 660 units gas, 6975'-94' 1000 units gas and 7046'-59' 1200 units gas.
5-3-80	TD 7190'. Tripping. Tripped for bit.
5-4-80	TD 7297'. Drilling. Tripped for hole in drill collars. DB: 7260'-66' 570 units gas, 7280'-95' 830 units gas.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Pacific Transmission Supply Company

8. FARM OR LEASE NAME: Federal

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

9. WELL NO.: 4-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progress			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Subsequent Report of Drilling Progress dated May 5 thru 11, 1980.

RECEIVED
MAY 16 1980
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED ORIGINAL SIGNED BY: R. J. FIRTH R. J. Firth TITLE Petroleum Engineer DATE May 13, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,UT; 1-OG&M,UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-Ralph Davis; 1-Enserch

*See Instructions on Reverse Side

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, Utah

4-28-80	TD 6281'. Drilling. DST no. 1 6187'-6237'. Final gas volume 8.95 MCF/D.
4-29-80	TD 6425'. Drilling. Tripped for hole in drill collars.
4-30-80	TD 6653'. Drilling. DB: 6618'-37' 450 units gas.
5-1-80	TD 6889'. Drilling DB: 6687'-97' 220 units gas, 6713'-18' 230 units gas, 6739'-54' 590 units gas, 6756'-87' 350 units gas and 6821'-33' 650 units gas.
5-2-80	TD 7098'. Drilling. DB: 6939'-50' 660 units gas, 6975'-94' 1000 units gas and 7046'-59' 1200 units gas.
5-3-80	TD 7190'. Tripping. Tripped for bit.
5-4-80	TD 7297'. Drilling. Tripped for hole in drill collars. DB: 7260'-66' 570 units gas, 7280'-95' 830 units gas.
5-5-80	TD 7461'. Drilling. DB: 7386'-91' 1000 units gas.
5-6-80	TD 7696'. Drilling. DB: 7469'-77' 1000 units gas, 7567'-78' 1100 units gas, 7602'-07' 1250 units gas.
5-7-80	TD 7907'. Drilling.
5-8-80	TD 8038'. Circ. & mixing mud. Prep. to trip for new bit.
5-9-80	TD 8042'. Drilling. Tripped for new bit.
5-10-80	TD 8240'. Circ. & mixing mud. DB: 8104'-26'.
5-11-80	TD 8240'. Circ. & mixing mud. Preparing to run DST no. 2.

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: *Pacific Transmission Supply Company*

WELL NAME: *Federal #4-4*

SECTION *4 NW SE* TOWNSHIP *10S* RANGE *23E* COUNTY *Uintah*

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: *8670'*

CASING PROGRAM:

13 3/8" @ 208' circ to surf
9 5/8" @ 2762'
7 7/8" openhole TD

FORMATION TOPS:

Green River	*surface*
Parachute Creek	*1324'*
Wasatch	*4820'*
Measverde	*6072'*
Buck Tongue	*8282'*
Castlegate	*8371'*

PLUGS SET AS FOLLOWS:

#1 8400' - 8200'
#2 6100' - 5900'
#3 4800' - 4600'
#4 2800' - 2600'
#5 30' - surface

11#, 46 vis abandonment mud between plugs, clean and restore site, erect regulation dryhole marker

DATE *May 21, 1980* SIGNED Original Signed By M. T. Minder

cc: USGS

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Pacific Transmission Supply Company

8. FARM OR LEASE NAME: Federal

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

9. WELL NO.: 4-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☒
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Drilling Progress			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Daily Drilling Reports attached, May 12 thru 24, 1980.

RECEIVED
MAY 29 1980
DIVISION OF
OIL, GAS, & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED R. E. Firth TITLE Petroleum Engineer DATE May 27, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,SLC,UT; 1-OG&M, UT; 1-JOsmond; 1-ERHenry; 1-DEBeardsley; 1-Ralph E. Davis; 1-Enserc

*See Instructions on Reverse Side

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Pacific Transmission Supply Company

3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T10S, R23E

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T10S, R23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KDB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Setting & Cementing Casing			☒
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Drilled 7-7/8" hole to TD 8670' and conducted electric logging operations. Ran 204 jts. 5-1/2", 17.0# N80 and 20.0# K55 production casing with guide shoe, float collar, and 8 centralizers. Land casing at 8400'. Cemented thru casing shoe with 900 sacks Thixotropic 10-0 cement and 100 sacks Class G cement. Preceded cement slurry with 10 bbls. mud flush. Good circulation throughout job. Bumped plug with 2800#, float held. Estimated cement top at 6000'. Set casing slips and land casing. Rig down drilling rig and equipment.

RECEIVED
MAY 29 1980
DIVISION OF OIL, GAS, & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED R. E. Firth TITLE Petroleum Engineer DATE May 27, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

3-USGS, SLC,UT; 1-OG&M, UT; 1-J.Osmond; 1-E.R.Henry; 1-D.E.Beardsley; 1-Ralph E. Davis; 1-Enserch

*See Instructions on Reverse Side

HYDROSTATIC PRESSURE TEST - B.O.P.'S

P. T. S. - FED. 4-4

OLSEN - RIG 2

APRIL 16, 1980

by

YELLOW JACKET TOOLS AND SERVICES, INC.

VERNAL, UTAH

TESTED BY: RON JAMES

TICKET NO. 20581

April 30, 1980

Pacific Transmission
85 South 200 East
Vernal, Utah 84078

Gentlemen,

We made a hydrostatic pressure test on your Federal 4-4-, located in the Bonaza, Utah area, in the Vernal, Utah district on April 16, 1980.
Test was made using (plug) 10" WKM or (packer) _____ or (both) ___.
When we arrived, the rig was nippling up
These changes were made to BOP hookup since previous test

List any delay observed to operation of BOPs during test: and, loss of closing pressure (other than hydril test) _____
_____ (Corrected) _____.

List items replaced during testing: _____
_____.

Closures were made using pump ___ accumulators x both ___ with observed pressure of 1600 for test to ram type BOPs and 1400 for test on Hydril.

Accumulator bottles 12 were pressured to 1600 at end of test.

Control valves operating as indicated on closing unit manifold except:
_____.

Extentions were _____ or were not x hooked up to BOPs at end of test.

No test desired to casing and kelly cock.

Items leaking at the conclusion of testing and/or malfunction of BOPs at end of test: _____
_____.

A drawing of surface control equipment has been prepared to show any leaks and malfunctions. A report taken from field notes and a pressure chart of the test.are also enclosed.

Your comments and suggestions well be appreciated.

Sincerely yours,

Yellow Jacket Tools and Services, Inc.

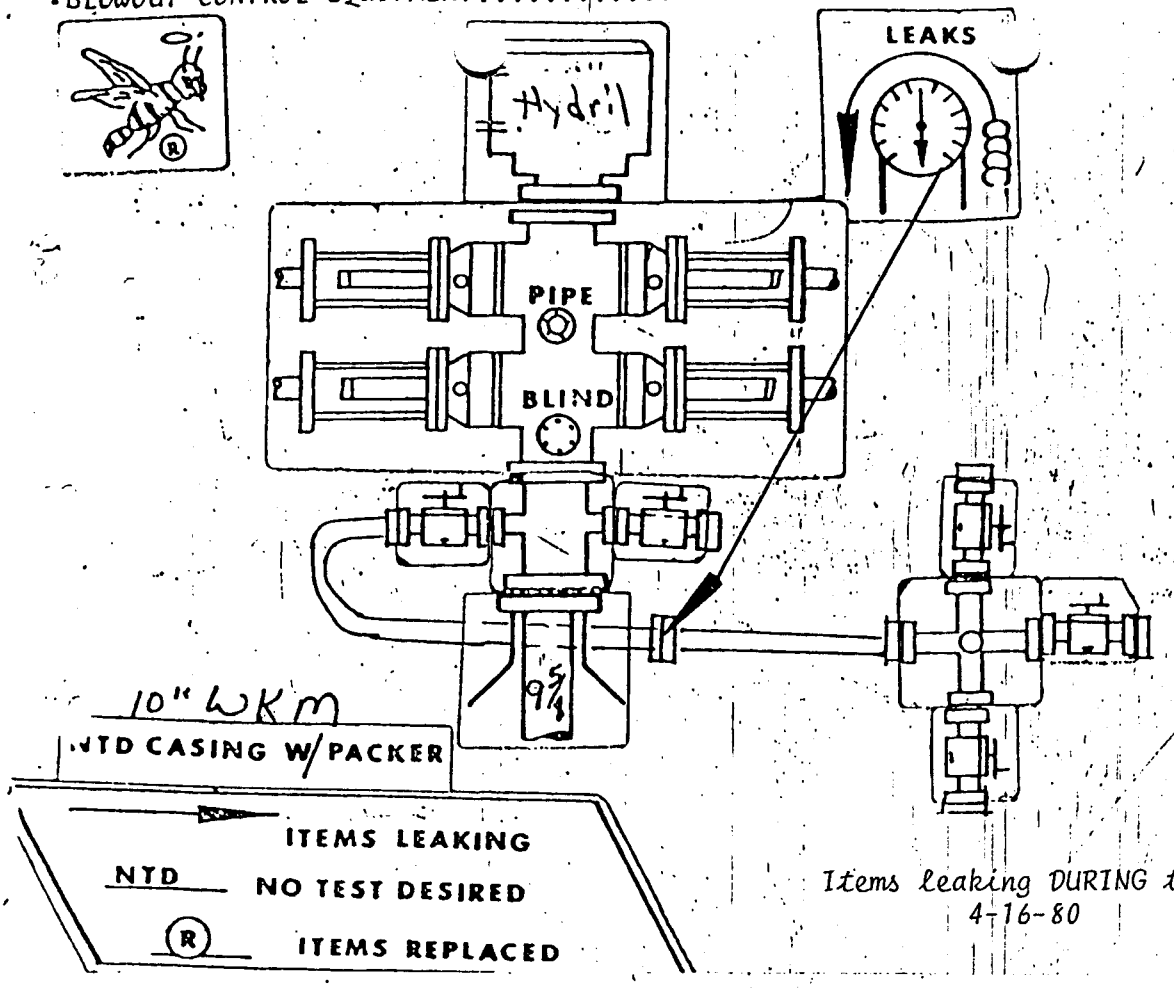
Billy Duff

bde/Enclosures

COMPANY P. T. S. Well FED 4-4 Date 4-16-80

Test #	Items Tested	Pressure Pt.	Pressure	Minutes Held	Results
	Blind rams choke line and manifold w/inside valves closed on manifold and inside valve on kill line	2" Connection			
1	#	#	2000#		Leak thru flange in middle of choke line
2	#	#	#		SAme leak
3	#	#	#	16 min.	No visible leaks
	Pipe rams w/inside valve on choke line closed	Down Drill Pipe			
4	#	#	2500#	15 min.	No visible leak
	Hydril everything same	#			
5	#	#	1500#	23 min.	No visible leaks

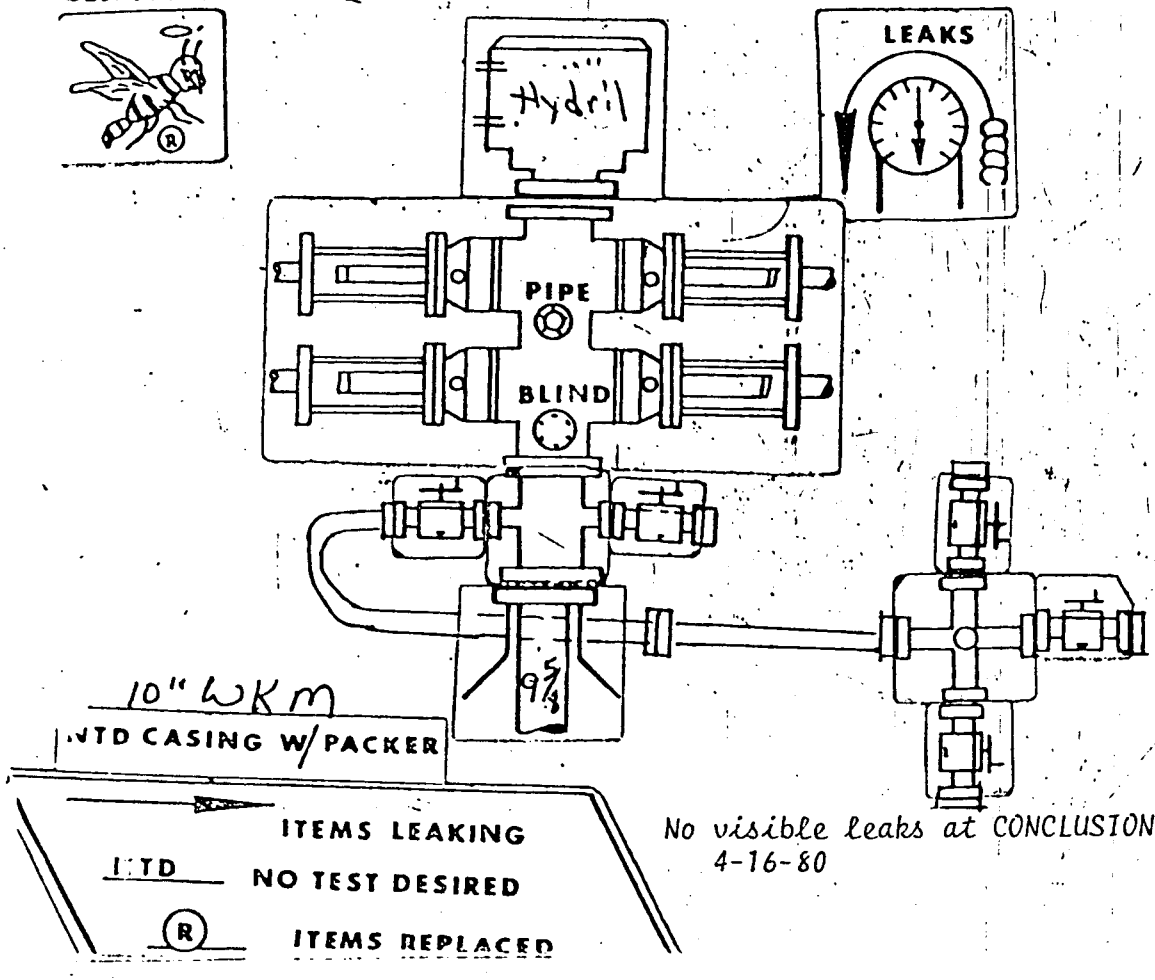
BLOWOUT CONTROL EQUIPMENT.....P. T. S. .....FEDERAL 4-4



UPPER K.C. NTD
LOWER K.C.
SAFETY VALVE

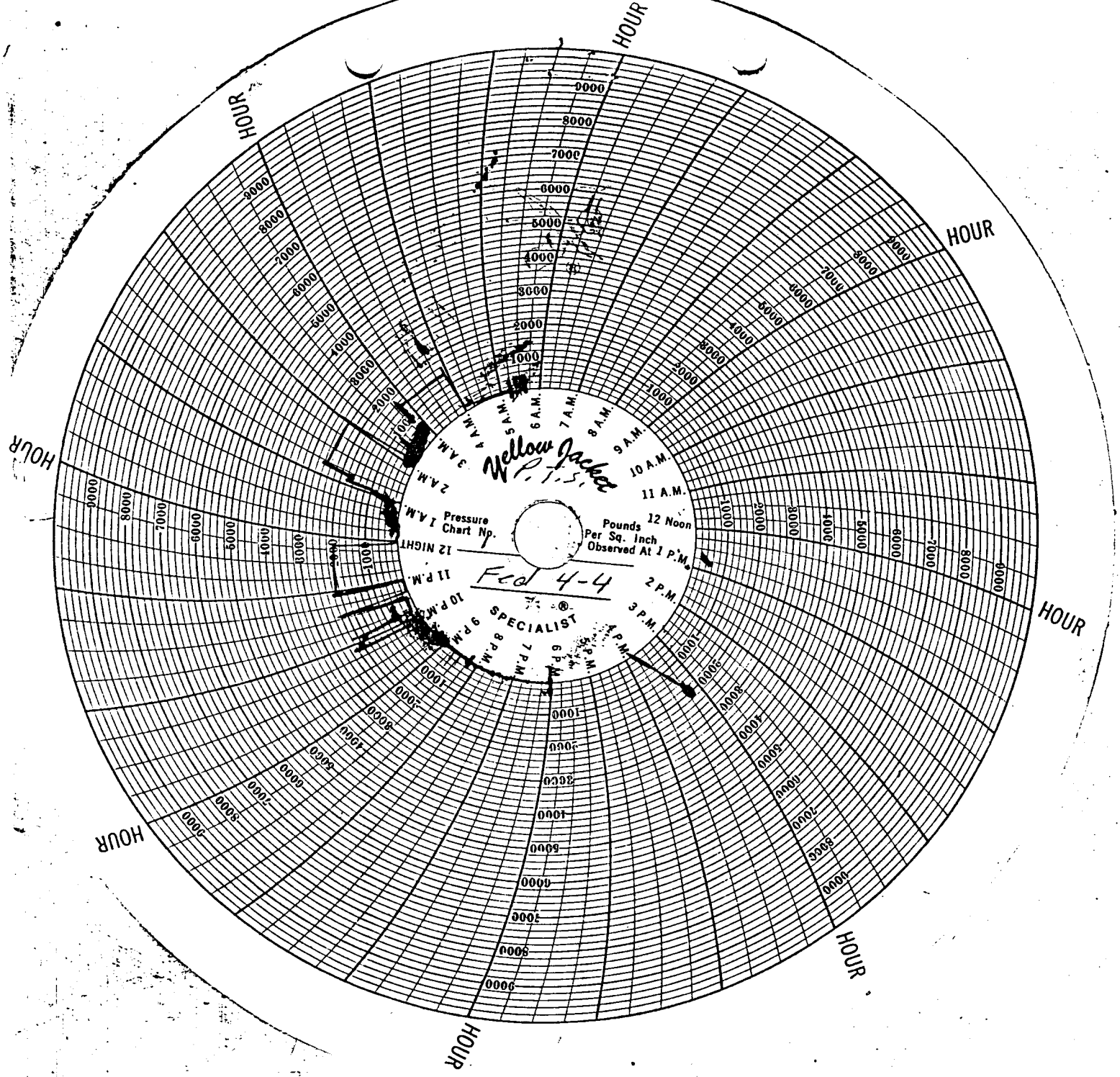
Items leaking DURING testing
4-16-80

BLOWOUT CONTROL EQUIPMENT.....P. T. S. .....FEDERAL 4-4



UPPER K.C. NTD
LOWER K.C.
SAFETY VALVE

No visible leaks at CONCLUSION of testing
4-16-80


HOUR
HOUR
HOUR
HOUR
HOUR
HOUR
Yellow Jacket
P. T. S.
Pressure Chart No.
Fed 4-4
Pounds Per Sq. Inch Observed At 1 P.M.
SPECIALIST
12 NIGHT
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
12 Noon
1 P.M.
2 P.M.
3 P.M.
4 P.M.
5 P.M.
6 P.M.
7 P.M.
8 P.M.
9 P.M.
10 P.M.
11 P.M.

DRILLSTEM TESTS

Drillstem Test #1, 6188'-6237' (51')

Tool opened with a 1" underwater blow, increased to bottom of bucket in 13 minutes and remained through flow period. (Gas to surface in 32 minutes during second flow).

	Time	PSI	Choke	MCF/D
Second Flow	35 minutes	2	1/4"	12.7
	40 minutes	2	1/4"	12.7
	45 minutes	2	1/4"	12.7
	50 minutes	2	1/4"	12.7
	55 minutes	1	1/4"	8.95
	60 minutes	1	1/4"	8.95
	65 minutes	1	1/4"	8.95
	70 minutes	1	1/4"	8.95
	75 minutes	1	1/4"	8.95
	80 minutes	1	1/4"	8.95
	85 minutes	1	1/4"	8.95
	90 minutes	1	1/4"	8.95

Sampler

Pressure in sampler	30 psig
Total volume in sampler	2100 cc
Total volume in sampler	1900 cc
Water	None
Gas	.1 cubic feet
Mud	1900 cc

Sample R_w	.6 @ 83 deg. F = 10,000 ppm chlorides
Water R_w	Fresh
Mud pit sample R_w	.7 @ 80 deg. F = 7,500 ppm chlorides

Sample Recovery - Top Sample R_w: .8 @ 85 deg. F = 6,200 ppm chlorides
Bottom Sample R_w: .5 @ 80 deg. F = 11,000 ppm chlorides

Recovery in Pipe: 100' Drilling mud = .61 bbls.

Pressures:	IH	3088#
	FH	3011#
	IF - 1	56# (15 minutes)
	FF - 1	62#
	IF - 2	56# (60 minutes)
	FF - 2	78#
	ISIP	2720# (90 minutes)
	FSIP	2892# (180 minutes)
	BHT	154 degrees F.

Mud Weight 9.4#
Viscosity 40

Drillstem Test #2, 8106'-8240' (134')

Tool opened with a weak blow; increased to bottom of bucket in 45 seconds and continued to increase to 35 psi in 5 minutes with gas to surface in 9 minutes (tool opened with gas to surface during second flow).

	Time	PSI	Choke	MCF/D
First Flow	9 minutes	50	1/4"	89.7
	10 minutes	60	1/4"	103.6
	15 minutes	80	1/4"	131.4
	20 minutes	90	1/4"	145.3
Second Flow	5 minutes	2	1/4"	12.7
	10 minutes	19	1/4"	45.5
	15 minutes	34	1/4"	67.5
	20 minutes	44	1/4"	81.2
	25 minutes	47	1/4"	85.5
	30 minutes	44	1/4"	81.2
	35 minutes	40	1/4"	75.8
	40 minutes	37	1/4"	71.8
	45 minutes	35	1/4"	69.0
	50 minutes	33	1/4"	66.2
	55 minutes	30	1/4"	61.9
	60 minutes	28	1/4"	59.0
	65 minutes	27	1/4"	57.7
	70 minutes	26	1/4"	56.3
	80 minutes	24	1/4"	53.2
	85 minutes	22	1/4"	50.2
	90 minutes	21	1/4"	48.7

Sampler

Pressure in sampler	300 psig
Total volume in sampler	2100 cc
Total volume in sampler	1400 cc
Water	1400 cc
Gas	.25 cubic feet

Sampler R_w	.69 @ 70 deg. F = 8900 ppm chlorides
Water R_w	10+
Mud pit sample R_w	10.0 @ 70 deg. F = 6000 ppm chlorides

Sample Recovery - Top Sample R_w: 1.0 @ 70 deg. F = 6,000 ppm chlorides
Middle Sample R_w: .55 @ 75 deg. F = 10,000 ppm chlorides
Bottom Sample R_w: .55 @ 75 deg. F = 10,000 ppm chlorides

Recovered - 1470' Total Fluid
180' Drilling Mud = 2.56 bbl.
1290' Water = 13.94 bbl.

DST #2 (Continued)

Pressures:	IH	5020#
	FH	4906#
	IF - 1	555# (20 minutes)
	FF - 1	551#
	IF - 2	502#
	FF - 2	649#
	ISIP	2572#
	FSIP	2061#
	BHT	177 degrees F

Mud Weight 11.6
Viscosity 46

Drillstem Test #3, 8372'-8433' (61')

Tool opened with a weak blow; increased to bottom of bucket in 45 seconds and continued to increase to IPSI in 12 minutes and remained through flow period. (No gas to surface during second flow (907 max)).

Sampler

Total volume in sampler	2150 cc
Total volume of sample	1800 cc
Pressure in sampler	45 PSIG
Mud	1800 cc
Gas	.2 cubic feet

Sampler R_w:	5.2 @ 70 deg. F = 1100 ppm chlorides
Water R_w:	10.0+ @ 70 deg. F = 530 ppm chlorides
Mud pit sample R_w:	4.0 @ 75 deg. F = 1300 ppm chlorides

Sample Recovery - Top Sample R_w: 4.0 @ 70 deg. F = 1350 ppm chlorides
Bottom Sample R_w: 5.2 @ 75 deg. F = 950 ppm chlorides

Fluid Recovery - 110' Drilling mud

Pressures:	IH	5085#
	FH	4973#
	IF - 1	96# (15 minutes)
	FF - 1	96#
	IF - 2	56# (60 minutes)
	FF - 2	76#
	ISIP	310# (45 minutes)
	FSIP	535# (95 minutes)
	BHT	180 degrees F

Mud Weight 11.4#
Viscosity 52

PTS #4-4 Federal
Uintah County, Utah
John Fleming

SAMPLE DESCRIPTIONS

Depth	Lithology
4400-6000'	Shale - Predominately gray, gold, red, brown, lavender, soft to firm (wet), flaky, slightly calcareous, occasionally splintery.
	Limestone-trace, brown-gray, mottled, blocky, microcrystalline.
	Sandstone-trace, tan, salt and pepper, very fine grained, well sorted, slightly calcareous.
	Anhydrite-trace, dark brown, microcrystalline, splintery to flaky, very hard.
6182-6208'	(DST #1) Sandstone-100%, white, clear, fine grained to medium grained, friable, very calcareous, poor porosity, dirt, tight.
6000-6100'	Limestone-trace, gray brown, brecciated, microcrystalline, fossiliferous in part.
	Anhydrite-trace, gray brown, dense, very hard, non-calcareous, cryptocrystalline.
6100-6300'	Shale-trace, waxy brick red shale.
	Sandstone-trace (10-30%) white, salt and pepper, fine grained, friable, calcareous, angular, medium-well sorted.
6300-7000'	Abundant cavings- red, gold, soft shale.
7000-7300'	Shale(60-80%) predominately gray, dull, dense, waxy in part, silty in part, micaceous in part, pyritic in part, also brown, brick, silty, blocky, trace fossils (ostracods).
	Sandstone-(20-40%) salt and pepper, white, very fine grained - fine grained, silty in part, friable, poorly sorted, angular, tight, calcareous, occasionally blue-gray, medium gray, poorly sorted.
7300-7600'	Shale-(50-100%) dark gray, blocky, hard, dense, occasionally silty, occasionally carbonaceous, trace ostracod conglomerate.
	Sandstone- salt and pepper, friable, medium grained, poorly sorted, angular.
7600-8000'	Shale- gray brown, brick blocky, dense, occasionally waxy, occasionally carbonaceous.
	Coal-(10-30%) trace of ostracod conglomerate.
	Sandstone-salt and pepper, medium grained, friable, poorly sorted, angular, (trace very fine grained, gray, tight, slightly siliceous).

8040-8100'	Sandstone-(50%) fine to medium grained, angular, poorly sorted, friable, salt and pepper, occasionally pyritic, slightly calcareous, occasionally carbonaceous.
	Shale-medium to dark gray, blocky, dense, hard (dry), occasionally waxy.
	Coal-trace.
8100-8240'	Sandstone-(70%) white, light gray, friable to hard, occasionally siliceous, fine to medium gray, medium sorted.
	Shale-as above.
8260-8371'	Buck Tongue Shale-black, dark gray, dense, occasionally silty, occasionally carbonaceous, blocky, non-calcareous.
8371-8430'	Castlegate Sand-white, clear, very fine grained to fine grained, friable, moderately clean, medium to well sorted, angular quartz grains, non-calcareous.
8450-8550'	Sandstone-(50-80%) clear, white, friable, fine grained, angular, poorly sorted, moderately clay filled, predominately clean, occasionally carbonaceous, non-calcareous.
	Shale-dark gray to black, dense, silty, carbonaceous in part, blocky, hard, firm, becoming shaley, dark gray, black, blue gray, slightly calcareous in part.
8550-8670'	Shale-(80-100%) black, gray, blue-gray, predominately dense to silty, occasionally waxy, blocky, slightly carbonaceous in part, non-calcareous, pyritic in part.
	Sandstone-fine to medium grained, salt and pepper, white, angular, poorly sorted, dirty, tight, firm to friable.

FORMATION TOPS

Formation	Depth	Datum
Green River	Surface	
Parachute Creek	1324'	+4006'
"H" Marker	2612'	+2718'
Wasatch Transition	4106'	+1224'
Wasatch	4820'	+ 510'
"Y" Marker	5733'	- 403'
Mesaverde (Farrer Facies)	6072'	- 742'
(Neslen Coaly Facies)	6730'	-1400'
Buck Tongue Shale	8282'	-2952'
Castlegate	8371'	-3041'
Mancos Shale	8551'	-3221'

Natural Gas Corporation of California

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

May 27, 1980

Mr. E. W. Guynn (3)
GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, UT 84104

Mr. Frank M. Hamner (1)
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Mr. J. Milton Wege (1)
RALPH E. DAVIS & ASSOCIATES
500 Jefferson, Suite 2031
Houston, TX 77002

Richard Smith (1)
ENSERCH EXPLORATION, INC.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Re: PTS 4-4 Federal
NW SE Section 4, T10S, R23E
Uintah County, UT

Gentlemen:

Enclosed are your required number of copies of Form 9-331, Sundry Notices and Reports on Wells, Subsequent Report of Setting & Cementing Casing dated May 27, 1980 and a Subsequent Report of Daily Drilling Progress dated May 27, 1980 for the above referenced well.

Very truly yours,

R. J. Firth
Petroleum Engineer

RJF/kh
Encls.
cc: J. Osmond
E. R. Henry
D. E. Beardsley
C. T. Clark (Cover Letter Only)

Natural Gas Corporation of California

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

May 27, 1980

Mr. Frank M. Hamner
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Re: PTS #4-4 Federal
NW SE Section 4, T10S, R23E
Uintah County, UT

Dear Sir:

Enclosed is a copy of Lynes Drill Stem Test No. 1 and No. 2 dated 4-28-80 for the above referenced well.

Very truly yours,

R. J. Firth/kh

R. J. Firth
Petroleum Engineer

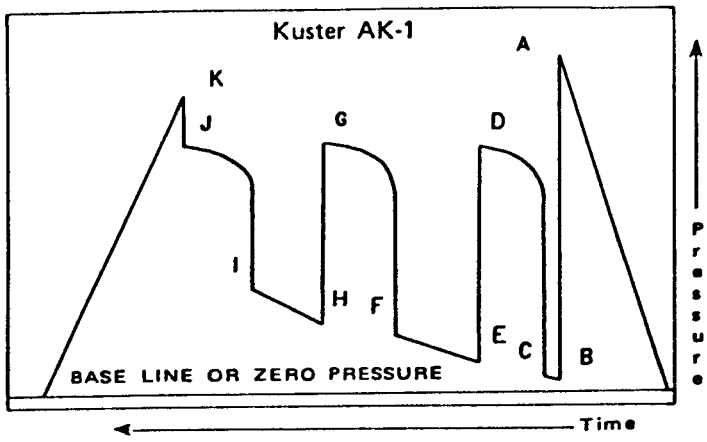
/kh
Encls.
cc: Rod Boschee
Peg Voss (Cover Letter Only)

LYNES

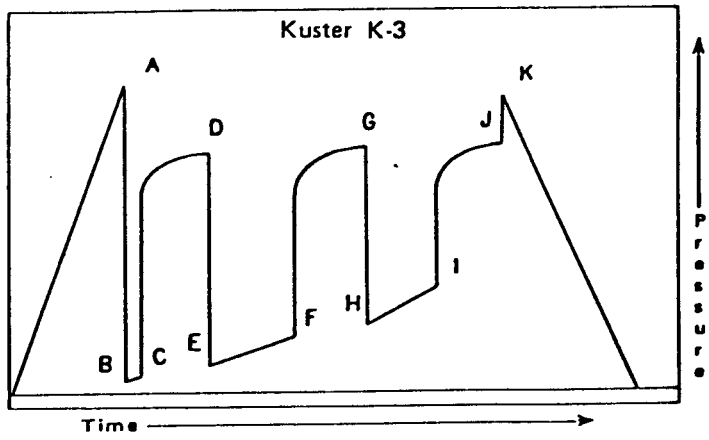
GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

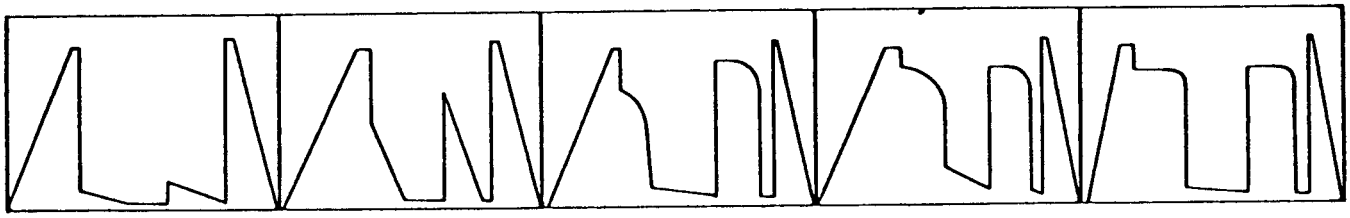
AK-1 recorders. Read from right to left.



K-3 recorders. Read from left to right.



A – Initial Hydrostatic
B – First Initial Flow
C – First Final Flow
D – Initial Shut-in
E – Second Initial Flow
F – Second Final Flow
G – Second Shut-in
H – Third Initial Flow
I – Third Final Flow
J – Third Shut-in
K – Final Hydrostatic



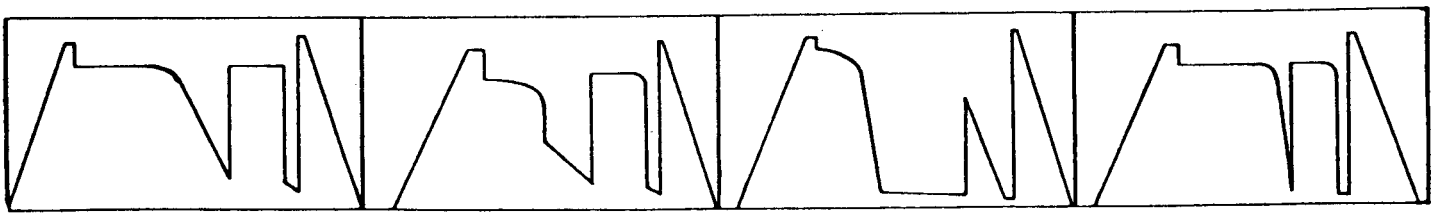
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

Slightly higher permeability. Small recovery, less than 200 ft).

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excelent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

Phone
713-790-9132

LYNES, INC

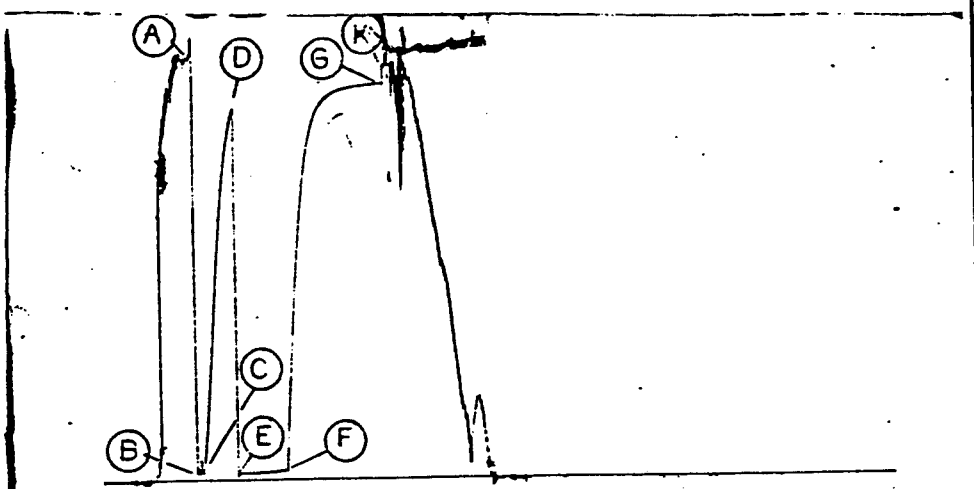
Box 12486
Houston, TX 77017

Operator Pacific Transmission Supply Co. Address See Distribution Well Name and No. Federal #4-4 Ticket No. 20789 Date 4-28-80 No. Final Copies 7

Contractor	Olsen Drilling	Top Choke	
Rig No.	2	Bottom Choke	9/16"
Spot	NW-SE	Size Hole	7 7/8"
Sec.	4	Size Rat Hole	--
Twp.	10 S	Size & Wt. D. P.	4 1/2" 16.60
Rng.	23 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/2"
County	Uintah	Length of D. C.	502'
State	Utah	Total Depth	6237'
Elevation	5328' K.B.	Interval Tested	6188-6237'
Formation	Mesaverde	Type of Test	Bottom Hole Conventional

Flow No. 1	15	Min.
Shut-in No. 1	60	Min.
Flow No. 2	90	Min.
Shut-in No. 2	180	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.
Bottom Hole Temp.	154°F	
Mud Weight	9.4	
Gravity	--	
Viscosity	40	

Tool opened @ 7:41AM



Inside Recorder

PRD Make Kuster K-3
No. 16463 Cap. 3450 @ 6168'

Press		Corrected
Initial Hydrostatic	A	3088
Final Hydrostatic	K	3011
Initial Flow	B	56
Final Initial Flow	C	62
Initial Shut-in	D	2720
Second Initial Flow	E	56
Second Final Flow	F	78
Second Shut-in	G	2892
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wy.
Our Tester: Myron Whiting
Witnessed By: Joe Monce

Did Well Flow – Gas yes Oil no Water no

RECOVERY IN PIPE: 100' Drilling mud = .61 bbl.

Top Sample R.W.: .8 @ 85°F = 6200 ppm. cl.
Bottom Sample R.W.: .5 @ 80°F = 11000 ppm. cl.

Blow Description:

1st Flow: Tool opened with a 1" underwater blow, increased to bottom of bucket in 13 minutes and remained thru flow period.

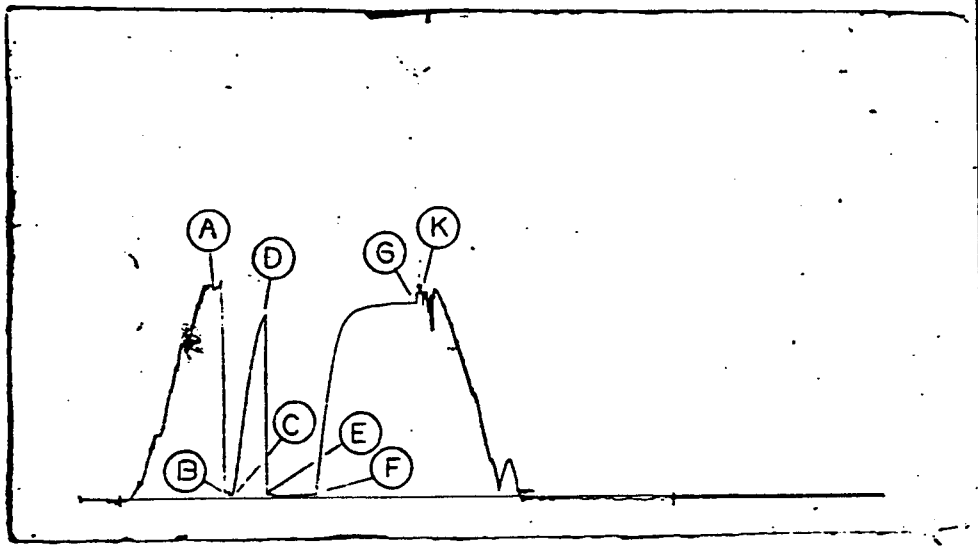
2nd Flow: Tool opened with a strong blow, increased to bottom of bucket in 15 seconds and continued to increase to 6 psi in 2 minutes; decreased to 3 psi in 30 minutes with gas to surface in 32 minutes. See Gas Volume Report.

Form 1

cd

LYNES, INC.

Pacific Transmission Supply Co. (Operator) | Federal #4-4 (Well Name and No.) | 1 (DST No.)



Inside Recorder

PRD Make Kuster K-3

No. 16830 Cap. 6900 @ 6172

Press		Correct
Initial Hydrostatic	A	3092
Final Hydrostatic	K	3017
Initial Flow	B	116
Final Initial Flow	C	75
Initial Shut-in	D	2711
Second Initial Flow	E	84
Second Final Flow	F	78
Second Shut-in	G	2879
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

PRD Make_____

No._____ Cap._____ @_____

Press		Correc
Initial Hydrostatic	A	
Final Hydrostatic	K	
Initial Flow	B	
Final Initial Flow	C	
Initial Shut-in	D	
Second Initial Flow	E	
Second Final Flow	F	
Second Shut-in	G	
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	
Pressure Below Bottom Packer Bled To		

Form 3

LYNES, INC.

Operator Pacific Transmission Supply Co Lease & No. Federal #4-4 DST No. 1 Revision #1

*Original Comments relative to DST #1 should be disregarded.

Comments relative to the analysis of the pressure chart from DST #1, Interval: 6188-6237', which was run in the above captioned well located in the NW-SE Section 4, T10S, R23E, Uintah County, Utah.

This analysis has been made on the basis of the gas recovery only, the Horner extrapolation method and the gas equations shown on the inside of the back cover of this report folder.

For purposes of this anlaysis, the following reservoir, gas properties, and test parameters have been used:

T_f = 614°R., u = 0.015 cps., h = 10 feet (estimated), t = 105 minutes, m = 1866569 psi/log cycle.

This analysis has been based on the Final extrapolated shut-in pressure build-up. The character of the Initial shut-in pressure build-up curve and the incremental reading data indicate that "steady-state" conditions were not attained during the Initial shut-in period.

1. Extrapolation of the Final shut-in pressure build-up curve indicates a maximum reservoir pressure of 2956 psi at the recorder depth of 6168 feet.

2. The calculated Average Production Rate, which was used in this analysis, 10.2 MCF/D, is based upon an average of the reported gas flow rates which were gauged during the final flow period.

3. The calculated Estimated Damage Ratio of 1.0 indicates no significant wellbore damage was present at the time of this formation test. This value could be influenced by gas saturations around the wellbore; the actual Damage Ratio could be somewhat less.

4. The calculated Effect Transmissibility of 4.7 md-ft./cp. indicates an average permeability to gas of 0.01 md., for the estimated 10 feet of effective porosity within the total 49 feet of interval tested,

5. The evaluation criteria used in the Drill Stem Test Analysis System indicate that the results obtained in this analysis should be reliable within reasonable limits relative to the assumptions which have been made.

P.D. Banks

P.D. Banks
Technical Service Manager

Lynes, Inc.

Form 2

WELL NAME: FEDERAL 4-4

DST NUMBER: 001

RECORDER NUMBER: 016463

INTERVAL TESTED: 6188FT TO 6237FT

RECORDER DEPTH: 6168.000FT

TOTAL FLOW TIME: 15.0MIN

FIRST SHUT IN PRESSURE (GAS)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (PSI)	PRESSURE (PSI^2)/10^6
.0	.0000	62.0	.00384
1.0	16.0000	142.0	.02016
2.0	8.5000	183.0	.03349
3.0	6.0000	221.0	.04884
4.0	4.7500	269.0	.07236
5.0	4.0000	309.0	.09548
6.0	3.5000	365.0	.13322
7.0	3.1429	408.0	.16646
8.0	2.8750	454.0	.20612
9.0	2.6667	514.0	.26420
10.0	2.5000	566.0	.32036
12.0	2.2500	687.0	.47197
14.0	2.0714	806.0	.64964
16.0	1.9375	925.0	.85562
18.0	1.8333	1049.0	1.10040
20.0	1.7500	1179.0	1.39004
22.0	1.6818	1316.0	1.73186
24.0	1.6250	1436.0	2.06210
26.0	1.5769	1556.0	2.42114
28.0	1.5357	1668.0	2.78222
30.0	1.5000	1786.0	3.18980
35.0	1.4286	2045.0	4.18202
40.0	1.3750	2261.0	5.11212
45.0	1.3333	2433.0	5.91949
50.0	1.3000	2568.0	6.59462
55.0	1.2727	2658.0	7.06496
60.0	1.2500	2720.0	7.39840

The initial shut-in pressure build-up curve has insufficient character to permit the use of Horner plot to determine reliable extrapolated shut-in pressure.

WELL NAME: FEDERAL 4-4

DST NUMBER: 001

RECORDER NUMBER: 016463

INTERVAL TESTED: 6188FT TO 6237FT

RECORDER DEPTH: 6163.000FT

TOTAL FLOW TIME: 105.0MIN

SECOND SHUT IN PRESSURE (GAS)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (PSI)	PRESSURE (PSI^2)/10^6
.0	.0000	78.0	.00608
1.0	106.0000	213.0	.04537
2.0	53.5000	306.0	.09364
3.0	36.0000	384.0	.14746
4.0	27.2500	458.0	.20976
5.0	22.0000	543.0	.29485
6.0	18.5000	628.0	.39438
7.0	16.0000	691.0	.47748
8.0	14.1250	766.0	.58676
9.0	12.6667	835.0	.69722
10.0	11.5000	904.0	.81722
12.0	9.7500	1049.0	1.10040
14.0	8.5000	1193.0	1.42325
16.0	7.5625	1334.0	1.77956
18.0	6.8333	1463.0	2.14037
20.0	6.2500	1575.0	2.48062
22.0	5.7727	1687.0	2.84597
24.0	5.3750	1799.0	3.23640
26.0	5.0385	1899.0	3.60620
28.0	4.7500	1986.0	3.94420
30.0	4.5000	2073.0	4.29733
40.0	3.6250	2413.0	5.82257
50.0	3.1000	2610.0	6.81210
60.0	2.7500	2712.0	7.35494
70.0	2.5000	2772.0	7.68398
80.0	2.3125	2809.0	7.89048
90.0	2.1667	2832.0	8.02022
100.0	2.0500	2848.0	8.11110
110.0	1.9545	2859.0	8.17388
120.0	1.8750	2867.0	8.21969
130.0	1.8077	2873.0	8.25413
140.0	1.7500	2878.0	8.28288
150.0	1.7000	2882.0	8.30592
160.0	1.6563	2886.0	8.32899
170.0	1.6176	2889.0	8.34632
180.0	1.5833	2892.0	8.36366

SLOPE: 1866569.00

EXTRAPOLATED PRESSURE: 2955.70

RESERVOIR PARAMETER'

RESERVR TEMP	614.000	BTTM HOL TMP	154.000	SPEC GRAVITY	.700
VISCOSITY	.015	Z FACTOR	.850	DST GAS RATE	10.200
WELL RADIUS	.328	PAY THICKNES	10.000	SUBSEA DEPTH	-840.000
WATER GRADNT	.433				

WELL NAME - FEDERAL 4-4

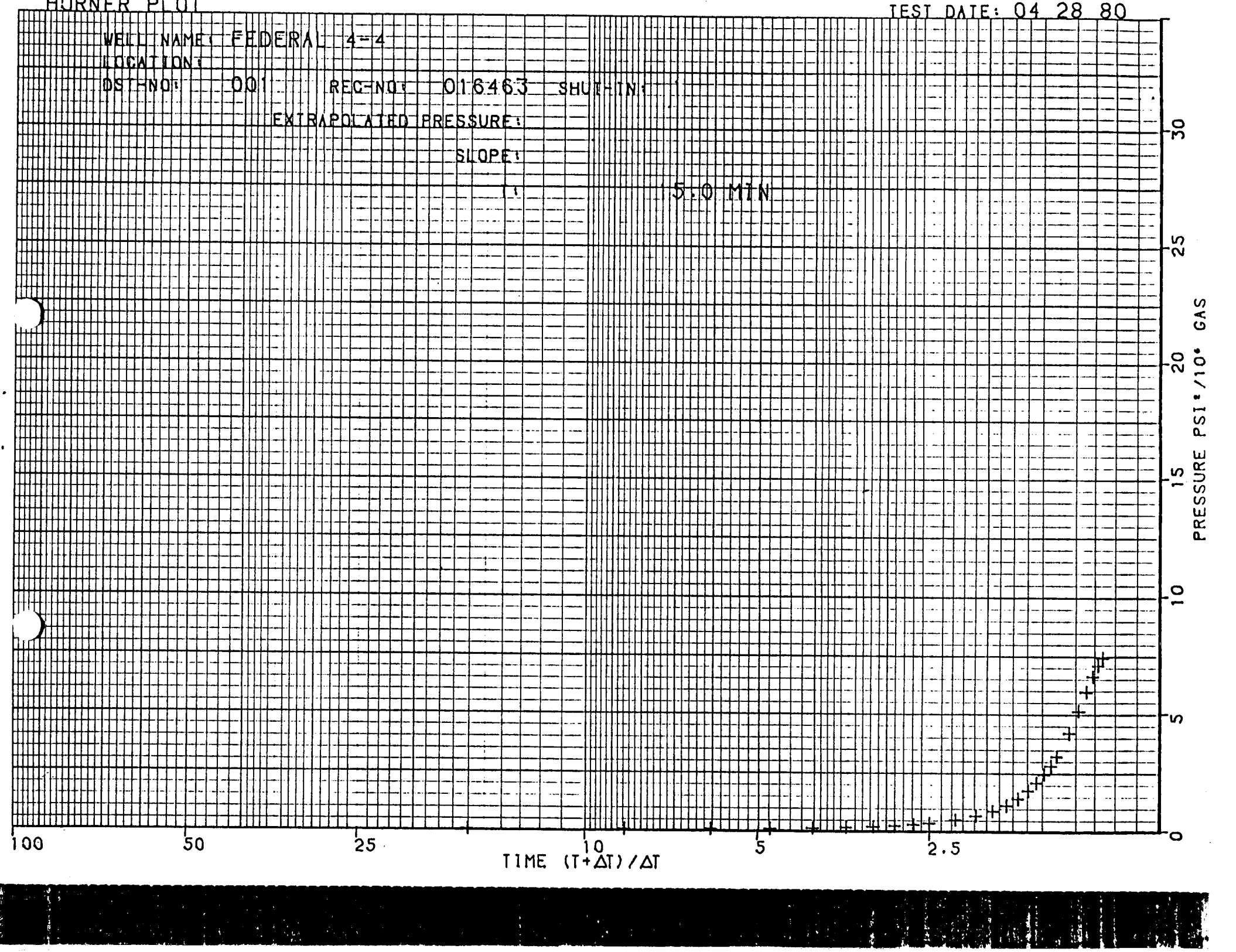
WELL OPERATOR - PACIFIC TRANSMISSION SUPPLY CO.

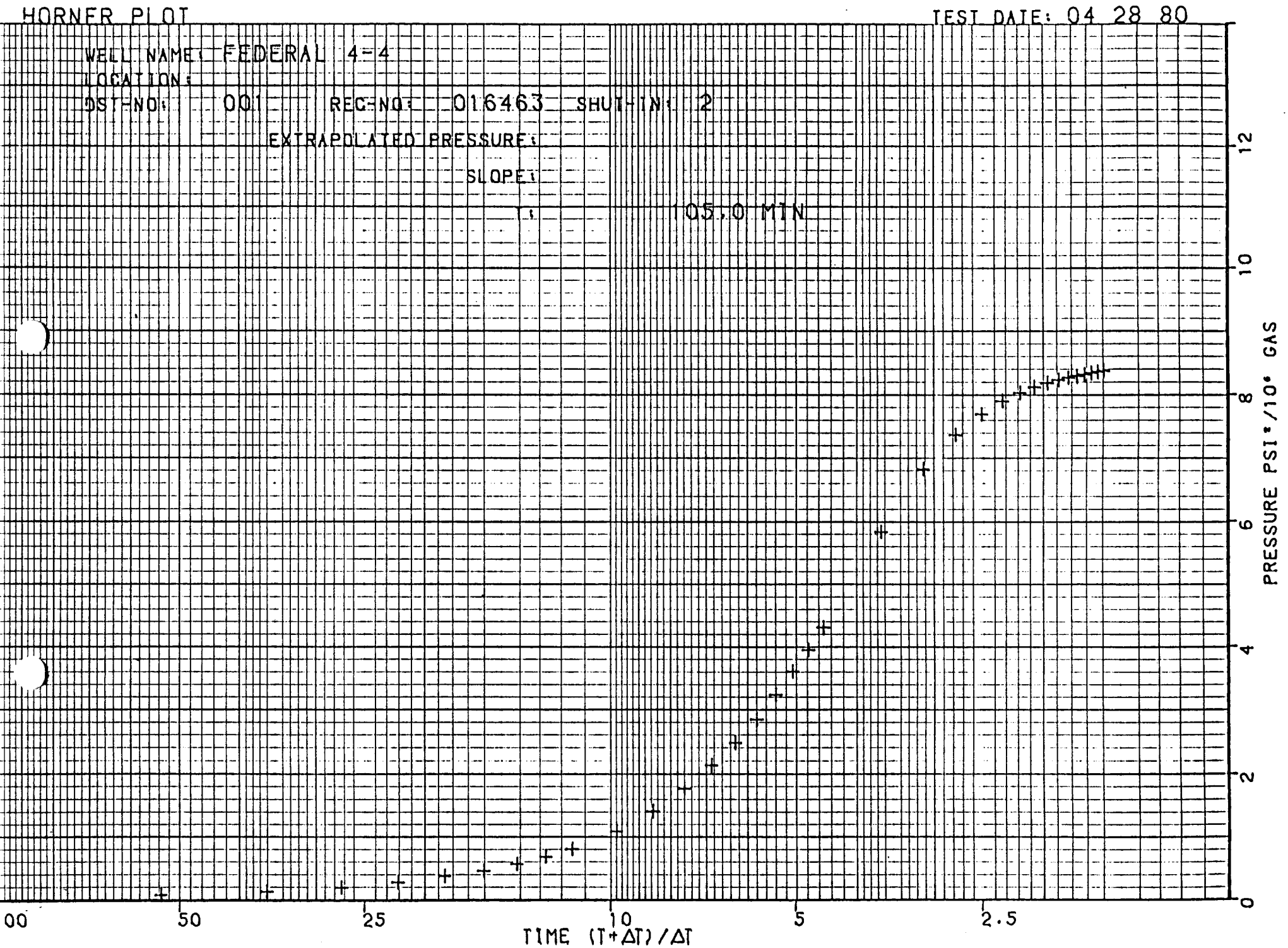
DST NUMBER - 1

RECORDER NUMBER - 16463

CALCULATIONS: SECOND SHUT IN

EXTRAPOLATED RESERVOIR PRESS.(PSIG)	2955.7
NO. OF POINTS ENTERED	13.0
NO. OF POINTS USED IN EXTRAPOLATION	6.0
ROOT MEAN SQUARE DEVIATION OF BEST FIT LINE(PSI)	.001
TOTAL FLOW TIME(MIN)	105.0
TRANSMISSIBILITY(MD-FT/CP)	4.7
IN SITU CAPACITY(MD-FT)	.1
AVERAGE EFFECTIVE PERMEABILITY(MD)	.01
RADIUS OF INVESTIGATION(FT)	1.0
ACTUAL CAPACITY(MD-FT)	.0
ESTIMATED DAMAGE RATIO	1.0
MAXIMUM AOF(MCF/D)	10.2
MINIMUM AOF(MCF/D)	10.2
MAXIMUM AOF DAMAGE REMOVED(MCF/D)	10.2
MINIMUM AOF DAMAGE REMOVED(MCF/D)	10.2
DRAWDOWN FACTOR(%)	
POTENTIOMETRIC SURFACE(FT)	5986.1


HORNER PLOT
TEST DATE: 04 28 80
WELL NAME: FEDERAL 4-4
LOCATION:
DST-NO: 001 REC-NO: 016463 SHUT-IN:
EXTRAPOLATED PRESSURE:
SLOPE:
T: 15.0 MIN
PRESSURE PSI*/10* GAS
0
5
10
15
20
25
30
100
50
25
10
5
2.5
TIME (T+ΔT)/ΔT


HORNER PLOT
TEST DATE: 04 28 80
WELL NAME: FEDERAL 4-4
LOCATION:
DST-NO: 001 REC-NO: 016463 SHUT-IN: 2
EXTRAPOLATED PRESSURE:
SLOPE:
T: 105.0 MIN
PRESSURE PSI*/10* GAS
0
2
4
6
8
10
12
00
50
25
10
5
2.5
TIME (T+ΔT)/ΔT

LYNES, INC.

Gas Volume Report

Operator Pacific Transmission Supply Company Lease & No. Federal #4-4 DST No. 1

Final Flow:

Min.	PSIG	Orifice Size	MCF/D	Min.	PSIG	Orifice Size	MCF/D
35	2	1/4"	12.7				
40	2	"	12.7				
45	2	"	12.7				
50	2	"	12.7				
55	1	"	8.95				
60	1	"	8.95				
65	1	"	8.95				
70	1	"	8.95				
75	1	"	8.95				
80	1	"	8.95				
85	1	"	8.95				
90	1	"	8.95				

Remarks:

Form 4

LYNES, INC.

Sampler Report

Company: Pacific Transmission Supply Co. Date: 4-28-80

Well Name & No.: Federal #4-4 Ticket No.: 20789

County: Uintah State: Utah

Test Interval: 6188-6237' DST No: 1

Total Volume of Sampler: 2100 cc.

Total Volume of Sample: 1900 cc.

Pressure in Sampler: 30 psig

Oil: None cc.

Water: None cc.

Mud: 1900 cc.

Gas: .1 cu. ft.

Other: None

Sample R.W.: .6 @ 83°F = 10000 ppm. cl.

Resistivity

Make Up Water Fresh @ of Chloride Content ppm.

Mud Pit Sample R.W.: .7 @ 80°F of Chloride Content 7500 ppm.

Gas/Oil Ratio Gravity °API @ °F

Where was sample drained On location.

Remarks:

Form 6

LYNES, INC.

Distribution of Final Reports

Operator Pacific Transmission Supply Co. Well Name and No. Federal #4-4

Original: Pacific Transmission Supply Co., 717 17th St., 2300 Energy Center 1, Denver, Co. 80202 Attn: J.L. Wroble

1 copy: Pacific Transmission Supply Co., P.O. Box 3093, Casper, Wyoming 82602 Attn: D.E. Beardsley

1 copy: Pacific Transmission Supply Co., 245 Market St., Rm 1326, San Francisco, Ca. 94105 Attn: e.R. Henry

1 copy: Pacific Transmission Supply, 85 South, 200 East, Vernal, Utah 84078 Attn: R.J. Firth

1 copy: U.S.G.S., Conservations, Division, 2000 Administration Bldg., 1745 West, 1700 South, Salt Lake City, Utah 84104

1 copy: Ralph E. Davis & Associates, 100 Jefferson, Suite 2031, Houston, Tx. 77002 Attn: J. Milan Wege

1 copy: Ensearch Exploration, Inc., 1322 Metrobank Bldg., 475 17th St., Denver, Co. 80202 Attn: R.W. Sharp

Form 6

NOMENCLATURE (Definition of Symbols)

- Q = average production rate during test, bbls./day
- Q_g = measured gas production rate during test, MCF/day
- k = permeability, md
- h = net pay thickness, ft. (when unknown, test interval is chosen)
- μ = fluid viscosity, centipoise
- Z = compressibility factor
- T_f = reservoir temperature, ° Rankine
- m = slope of final SIP buildup plot, psig/cycle (psig²/cycle for gas)
- b = approximate radius of investigation, feet
- r_w = wellbore radius, feet
- t_p = total flowing time, minutes
- P_* = Extrapolated maximum reservoir pressure, psig
- P_f = final flowing pressure, psig
- P.I. = productivity index, bbls./day/psi
- $P.I._s$ = theoretical productivity index with damage removed, bbl./day/psi
- D.R. = damage ratio
- E.D.R. = estimated damage ratio
- AOF = absolute open flow potential, MCF/D
- AOF_s = theoretical absolute open flow if damage were removed
- $\bar{z}$ = subsea depth
- W = water gradient based on salinity
- H_* = potentiometric surface

INTERPRETATION CALCULATIONS (OIL/WATER)

AVERAGE PRODUCTION RATE DURING TEST

$$Q = \frac{1440\ (\text{drill collar capacity} \times \text{recovery} + \text{drill pipe capac} \times \text{recovery})}{\text{initial flow time} + \text{final flow time}}$$

$$= \frac{1440\ [(\quad)(\quad) + (\quad)(\quad)]}{(\quad) + (\quad)}$$

$$= 1440\ (.0145 \text{ or } .0073)\frac{(\quad)}{(\quad)}(\quad)$$

= ..... bbls./day

Mud Expansion = — ..... ft. (Drill Collar Conversion is Considered)

FLUID PROPERTIES Estimated Bottom Hole Temperature °

API Gravity @ 60° F. ..... ° Specific Gravity @ 60° F. Est. Viscosity ..... cp

TRANSMISSIBILITY

$$\frac{kh}{\mu} = \frac{162.6Q}{m} = \frac{162.6\ (\quad)}{(\quad)} = \text{.....} \text{ md.-ft/cp}$$

IN SITU CAPACITY

$$kh = (\quad)(\quad) = \text{.....} \text{ md.-ft.}$$

AVERAGE EFFECTIVE PERMEABILITY Estimated Pay Thickness Ft. / Actual Pay Thickness Ft.

$$k = \frac{(\quad)}{(\quad)} = \text{.....} \text{ md.}$$

PRODUCTIVITY INDEX

$$PI = \frac{Q}{P_* - P_f} = \frac{(\quad)}{(\quad) - (\quad)} = \text{.....} \text{ bbl./day-psi}$$

DAMAGE RATIO

$$D.R. = \frac{0.183\,(P_* - P_f)}{m} = \frac{0.183\ [(\quad) - (\quad)]}{(\quad)} = \text{.....}$$

PRODUCTIVITY INDEX WITH DAMAGE REMOVED

$$P.I._s = P.I. \times D.R. = (\quad)(\quad) = \text{.....} \text{ bbl./day-psi}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = \sqrt{kt_p} = \sqrt{(\quad)(\quad)} = \text{.....} \text{ ft.}$$

Drawdown Factor $= \frac{I.S.I.P. - F.S.I.P.}{I.S.I.P.} \times 100 = \frac{(\quad) - (\quad)}{(\quad)} \times 100 = \text{.....}\%$ (4% to 5% is considered serious or substantial)

Potentiometric Surface $= H_* = \bar{z} + \frac{P_*}{w}$ $H_* = \text{.....} + \frac{(\quad)}{(\quad)} = + \text{.....} \pm \text{.....}$ ft.

INTERPRETATION CALCULATIONS (GAS)

ESTIMATED GAS PROPERTIES $R(T_f) = \text{.....}°$ Estimated Bottom Hole Temperature °

Gravity @ 60° F. ..... Viscosity (Res.) ..... cp. Compressibility Factor (Z) .....

TRANSMISSIBILITY Measured D.S.T. Gas Rate = ... mcf/d.

$$\frac{kh}{\mu} = \frac{1637\ Q_g\ ZT_f}{m} \qquad \frac{1637\ (\quad)(\quad)(\quad)}{(\quad)} = \text{.....} \frac{\text{md.-ft.}}{\text{cp.}}$$

IN SITU CAPACITY

$$kh = (\quad)(\quad) = \text{.....} \text{ md.-ft.}$$

AVERAGE EFFECTIVE PERMEABILITY Estimated Pay Thickness Ft. / Actual Pay Thickness Ft.

$$k = \frac{(\quad)}{(\quad)} = \text{.....} \text{ md.}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = 0.02\sqrt{kt_pP_*} = 0.02\sqrt{(\quad)(\quad)(\quad)} = \text{.....} \text{ ft.}$$

ACTUAL CAPACITY

$$kh = \frac{3270\ Q_g\ \mu\ Z\ T_f \log(0.472r_e/r_w)}{P_*^2 - P_f^2} = \frac{3270\ (\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad) - (\quad)} = \text{.....} \text{ md.-ft.}$$

ESTIMATED DAMAGE RATIO

$$E.D.R. = \frac{(P_*^2 - P_f^2)}{m\,[\log T_f + 2.65]}$$

E.D.R. = ...

ESTIMATED RANGE OF AOF POTENTIAL

$$\text{Max. AOF} = \frac{Q_g P_*^2}{P_*^2 - P_f^2} = \frac{(\quad)(\quad)}{[(\quad) - (\quad)]} = \frac{(\quad)}{(\quad)} = \text{.....} \text{ MCF/D}$$

$$\text{Min. AOF} = \frac{Q_g P_*}{\sqrt{P_*^2 - P_f^2}} = \frac{(\quad)(\quad)}{\sqrt{[(\quad) - (\quad)]}} = \frac{(\quad)}{(\quad)} = \text{.....} \text{ MCF/D}$$

ESTIMATED RANGE OF AOF POTENTIAL, DAMAGE REMOVED

Max. AOF_s = (Max. AOF) (D.R.) = ( ) ( ) = ... MCF/D

Min. AOF_s = (Min. AOF) (D.R.) = ( ) ( ) = ... MCF/D

Drawdown Factor $= \frac{ISIP - FSIP}{ISIP} \times 100 = \frac{(\quad) - (\quad)}{(\quad)} \times 100 = \text{.....}\%$ (4% to 5% is considered serious or substantial)

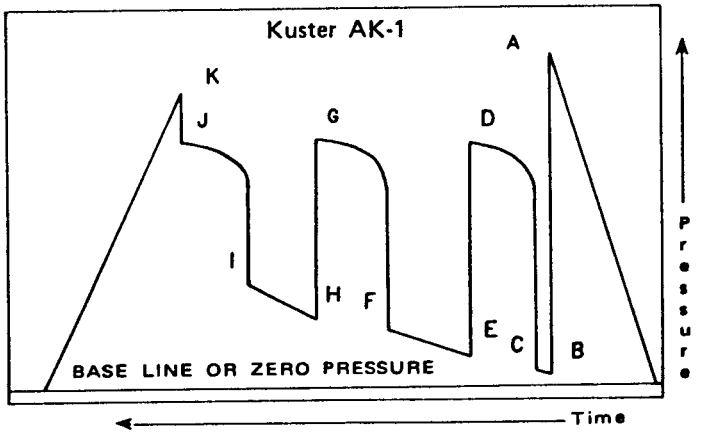
Potentiometric Surface $= H_* = \bar{z} + \frac{P_*}{w}$ $H_* = \text{.....} + \frac{(\quad)}{(\quad)} = + \text{.....} \pm \text{.....}$ ft.

LYNES

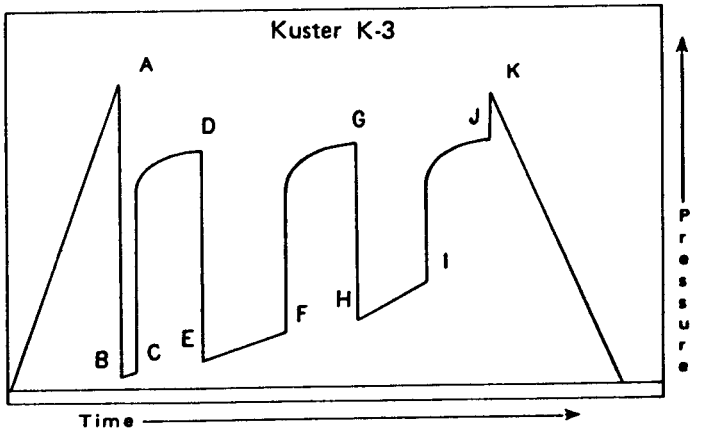
GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

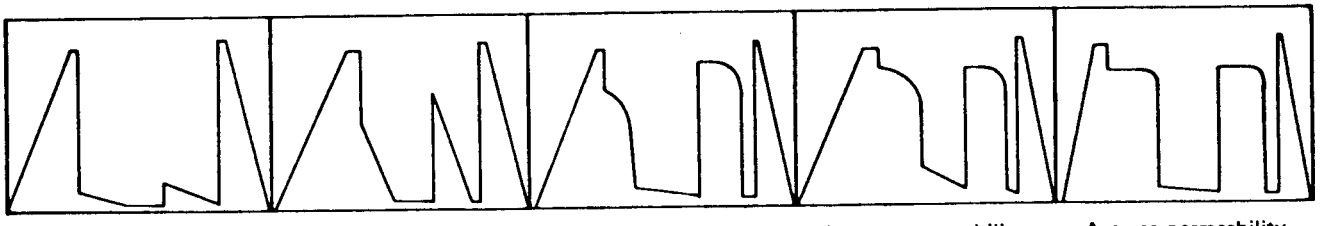
AK-1 recorders. Read from right to left.



K-3 recorders. Read from left to right.



A – Initial Hydrostatic
B – First Initial Flow
C – First Final Flow
D – Initial Shut-in
E – Second Initial Flow
F – Second Final Flow
G – Second Shut-in
H – Third Initial Flow
I – Third Final Flow
J – Third Shut-in
K – Final Hydrostatic



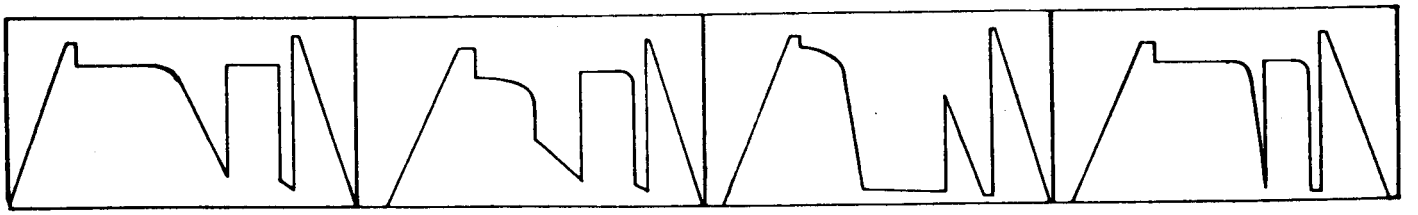
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

Slightly higher permeability. Small recovery, less than 200 ft).

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excelent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

· Phone
713-790-9132

LYNES, INC

Box 12486
Houston, TX 77017

Operator Pacific Transmission Supply Co.

Address See Distribtuion

Well Name and No. Federal #4-4

Ticket No. 20722

Date 5-13-80

DST No. 2

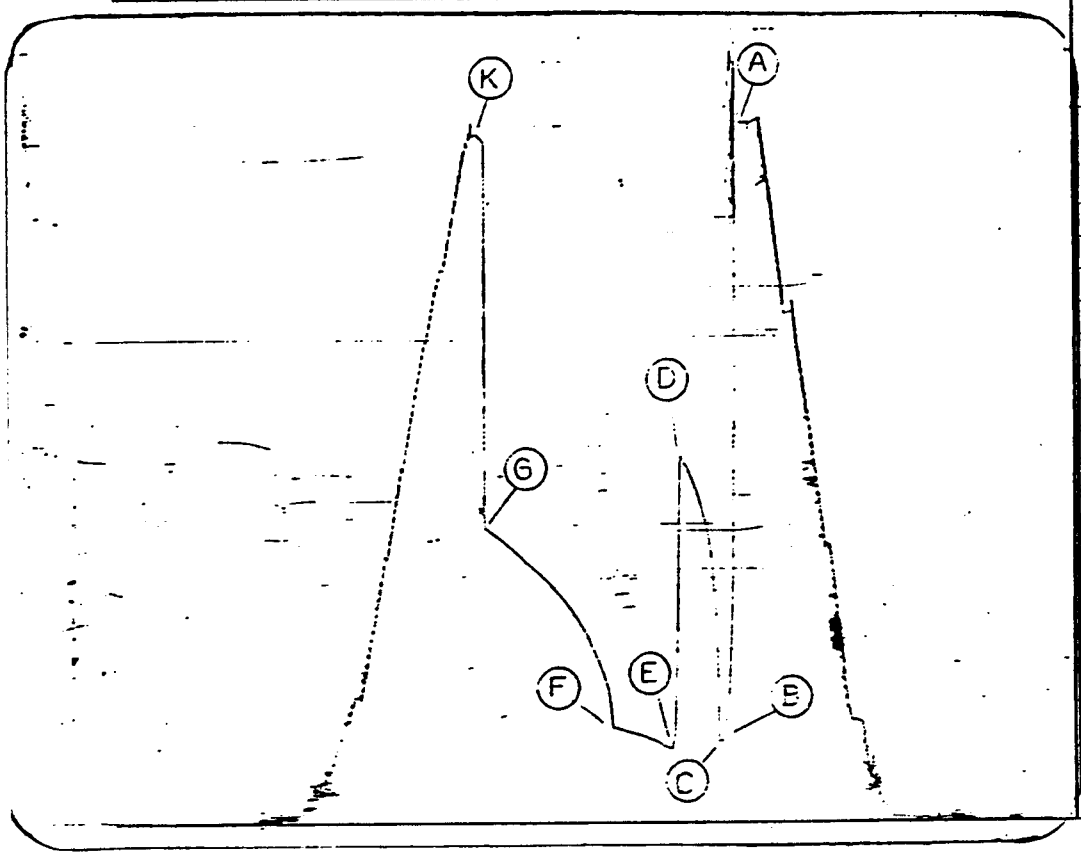
No. Final Copies 7

Contractor	Olsen Drilling	Top Choke	1/4"
Rig No.	2	Bottom Choke	9/16"
Spot	NW-SE	Size Hole	7 7/8"
Sec.	4	Size Rat Hole	--
Twp.	10 S	Size & Wt. D. P.	4 1/2" 16.60
Rng.	23 E	Size Wt. Pipe	--
Field	Wildcat	I. D. of D. C.	2 1/2"
County	Uintah	Length of D. C.	540'
State	Utah	Total Depth	8240'
Elevation	5328' "K.B."	Interval Tested	8106-8240'
Formation	--	Type of Test	~~Bottom Hole~~ Conventional

Flow No. 1	20	Min.
Shut-in No. 1	60	Min.
Flow No. 2	90	Min.
Shut-in No. 2	180	Min.
Flow No. 3	--	Min.
Shut-in No. 3	--	Min.

Bottom Hole Temp.	177°F
Mud Weight	11.6
Gravity	--
Viscosity	46

Tool opened @ 2:37 AM



Inside Recorder

PRD Make Kuster AK-1
No. 3604 Cap. 5700 @ 8090'

		Press Corrected
Initial Hydrostatic	A	5020
Final Hydrostatic	K	4906
Initial Flow	B	555
Final Initial Flow	C	551
Initial Shut-in	D	2572
Second Initial Flow	E	502
Second Final Flow	F	649
Second Shut-in	G	2061
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, Wyo.
Our Tester: Steve Ogden
Witnessed By: Joe Monce

Did Well Flow – Gas yes Oil no Water no

RECOVERY IN PIPE: 1470' Total fluid
180' Drilling mud = 2.56 bbl.
1290' Water = 13.94 bbl.

Top Sample R.W.: 1.0 @ 70°F = 6,000 ppm. Cl.
Middle Sample R.W.: .55 @ 75°F = 10,000 ppm. Cl.
Bottom Sample R.W.: .55 @ 75°F = 10,000 ppm. Cl.

Blow Description:

1st flow: Tool opened with a weak blow; increased to bottom of bucket in 45 second and continued to increase to 35 psi. in 5 minutes with gas to surface in 9 minutes. See gas volume report.

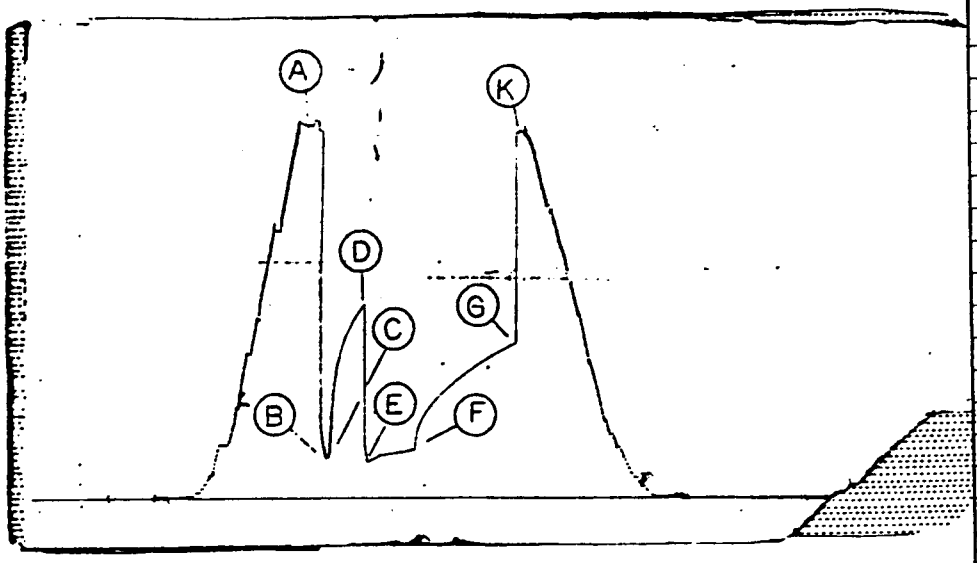
2nd Flow: Tool opened with gas to surface; see gas volume report.

Form 1

cm

LYNES, INC.

Pacific Transmission Supply Co.	Federal #4-4	2
Operator	Well Name and No.	DST No.

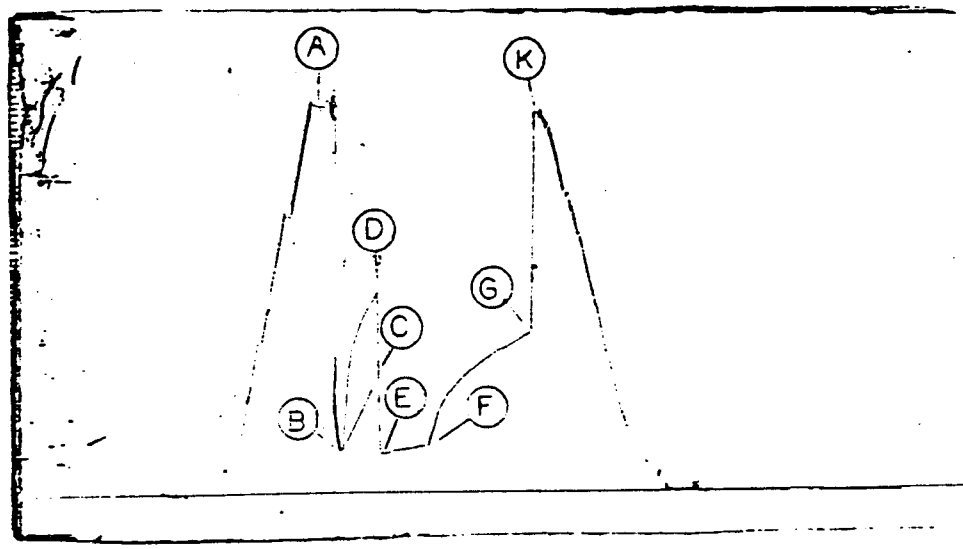


Outside Recorder

PRD Make Kuster K-3

No. 20187 Cap. 6400 @ 8130'

Press		Corrected
Initial Hydrostatic	A	5039
Final Hydrostatic	K	4926
Initial Flow	B	578
Final Initial Flow	C	573
Initial Shut-in	D	2592
Second Initial Flow	E	521
Second Final Flow	F	670
Second Shut-in	G	2083
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		



Inside Recorder

PRD Make Kuster K-3

No. 13030 Cap. 6200 @ 8120'

Press		Corrected
Initial Hydrostatic	A	5034
Final Hydrostatic	K	4920
Initial Flow	B	572
Final Initial Flow	C	567
Initial Shut-in	D	2586
Second Initial Flow	E	517
Second Final Flow	F	663
Second Shut-in	G	2076
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--
Pressure Below Bottom Packer Bled To		

Form 3

RESERVOIR PARAMETERS

RESERVR TEMP	137.000	BTTM HOL TMP	177.00	SPEC GRAVITY	.700
VISCOSITY	.015	Z FACTOR	.850	DST GAS RATE	61.380
WELL RADIUS	.328	PAY THICKNES	10.000	SUBSEA DEPTH	-2762.000
WATER GRADNT	.433				

REPORT #2978

WELL NAME - FEDERAL 4-4

WELL OPERATOR - PACIFIC TRANSMISSION SUPPLY CO.

DST NUMBER - 2

RECORDER NUMBER - 3604

CALCULATIONS: SECOND SHUT IN

EXTRAPOLATED RESERVOIR PRESS.(PSIG)	2747.0
NO. OF POINTS ENTERED	10.0
NO. OF POINTS USED IN EXTRAPOLATION	4.0
ROOT MEAN SQUARE DEVIATION OF BEST FIT LINE(PSI)	.001
TOTAL FLOW TIME(MIN)	110.0
TRANSMISSIBILITY(MD-FT/CP)	3.4
IN SITU CAPACITY(MD-FT)	.1
AVERAGE EFFECTIVE PERMEABILITY(MD)	.01
RADIUS OF INVESTIGATION(FT)	1.0
ACTUAL CAPACITY(MD-FT)	.0
ESTIMATED DAMAGE RATIO	.1
MAXIMUM AOF(MCF/D)	65.0
MINIMUM AOF(MCF/D)	63.2
DRAWDOWN FACTOR(%)	12.2
POTENTIOMETRIC SURFACE(FT)	3582.0

Pacific Transmission Supply Co., Federal #4-4, DST #2 Report #2978

Comments relative to the analysis on DST #2 on the above mentioned well should be disregarded.

"Steady-State" conditions were not achieved during either Initial & Final shut-in periods, therefore, the calculated reservoir parameters should be considered as indicators only.

WELL NAME: FEDERAL 4-4

DST NUMBER: 002

RECORDER NUMBER: 003604

INTERVAL TESTED: 8240FT TO 8106FT

RECORDER DEPTH: 8090.001FT

TOTAL FLOW TIME: 20.0MIN

FIRST SHUT IN PRESSURE (GAS)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (PSI)	PRESSURE (PSI^2)/10^6
.0	.0000	551.0	.30360
1.0	21.0000	597.0	.35641
2.0	11.0000	891.0	.79388
3.0	7.6667	1180.0	1.39240
4.0	6.0000	1347.0	1.81441
5.0	5.0000	1437.0	2.06497
6.0	4.3333	1511.0	2.28312
7.0	3.8571	1564.0	2.44610
8.0	3.5000	1625.0	2.64062
9.0	3.2222	1674.0	2.80228
10.0	3.0000	1718.0	2.95152
12.0	2.6667	1794.0	3.21844
14.0	2.4286	1865.0	3.47822
16.0	2.2500	1926.0	3.70948
18.0	2.1111	1980.0	3.92040
20.0	2.0000	2027.0	4.10873
22.0	1.9091	2072.0	4.29318
24.0	1.8333	2113.0	4.46477
26.0	1.7692	2152.0	4.63110
28.0	1.7143	2189.0	4.79172
30.0	1.6667	2221.0	4.93284
35.0	1.5714	2292.0	5.25326
40.0	1.5000	2356.0	5.55073
45.0	1.4444	2413.0	5.82257
50.0	1.4000	2468.0	6.09102
55.0	1.3636	2521.0	6.35544
60.0	1.3333	2572.0	6.61518

The initial shut-in pressure build-up curve has insufficient character to permit the use of a Horner plot to determine a reliable extrapolated shut-in pressure.

DST NUMBER: 002

RECORDER NUMBER: 003604

INTERVAL TESTED: 8240FT TO 8106FT

RECORDER DEPTH: 8090.001FT

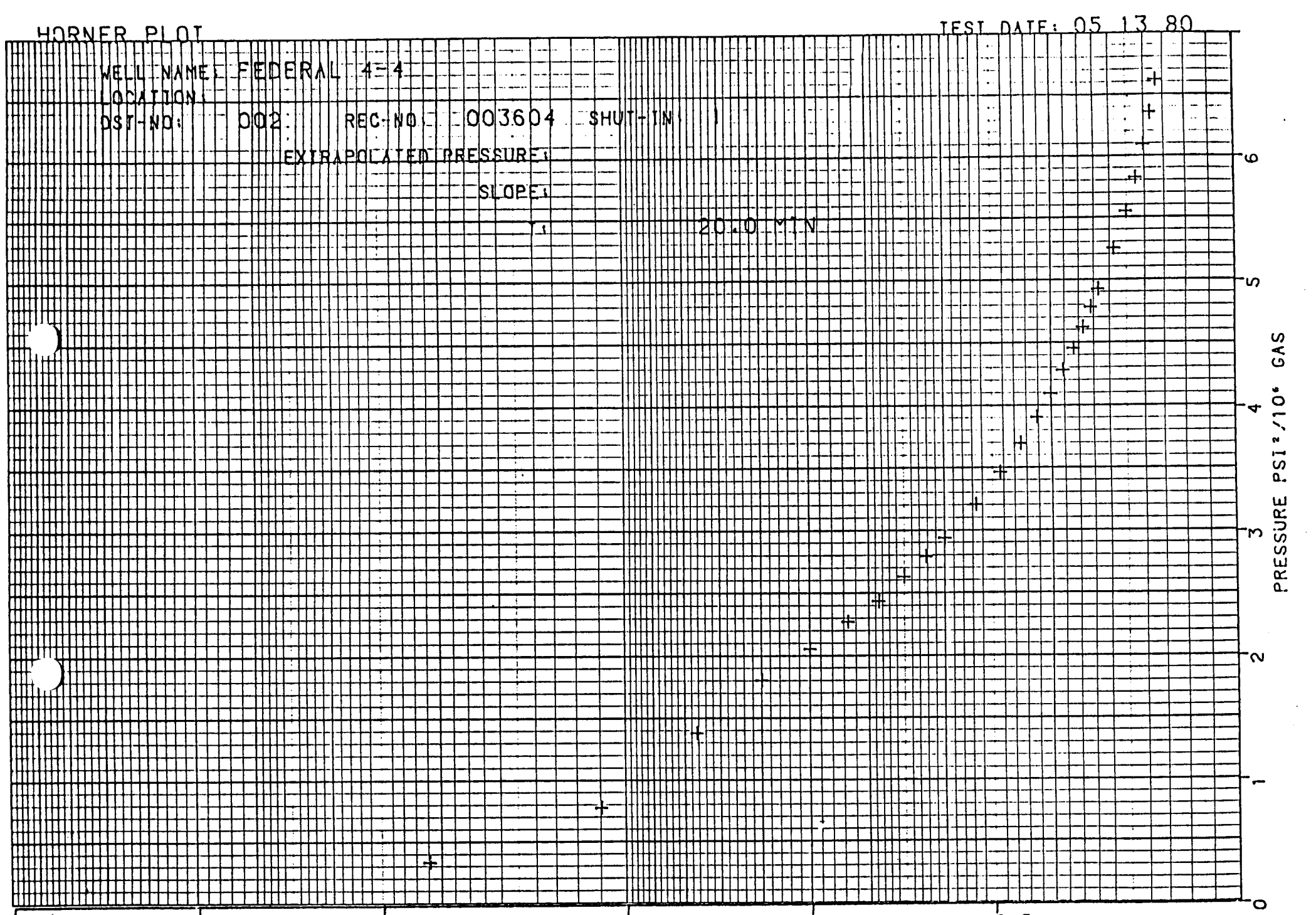
TOTAL FLOW TIME: 110.0MIN

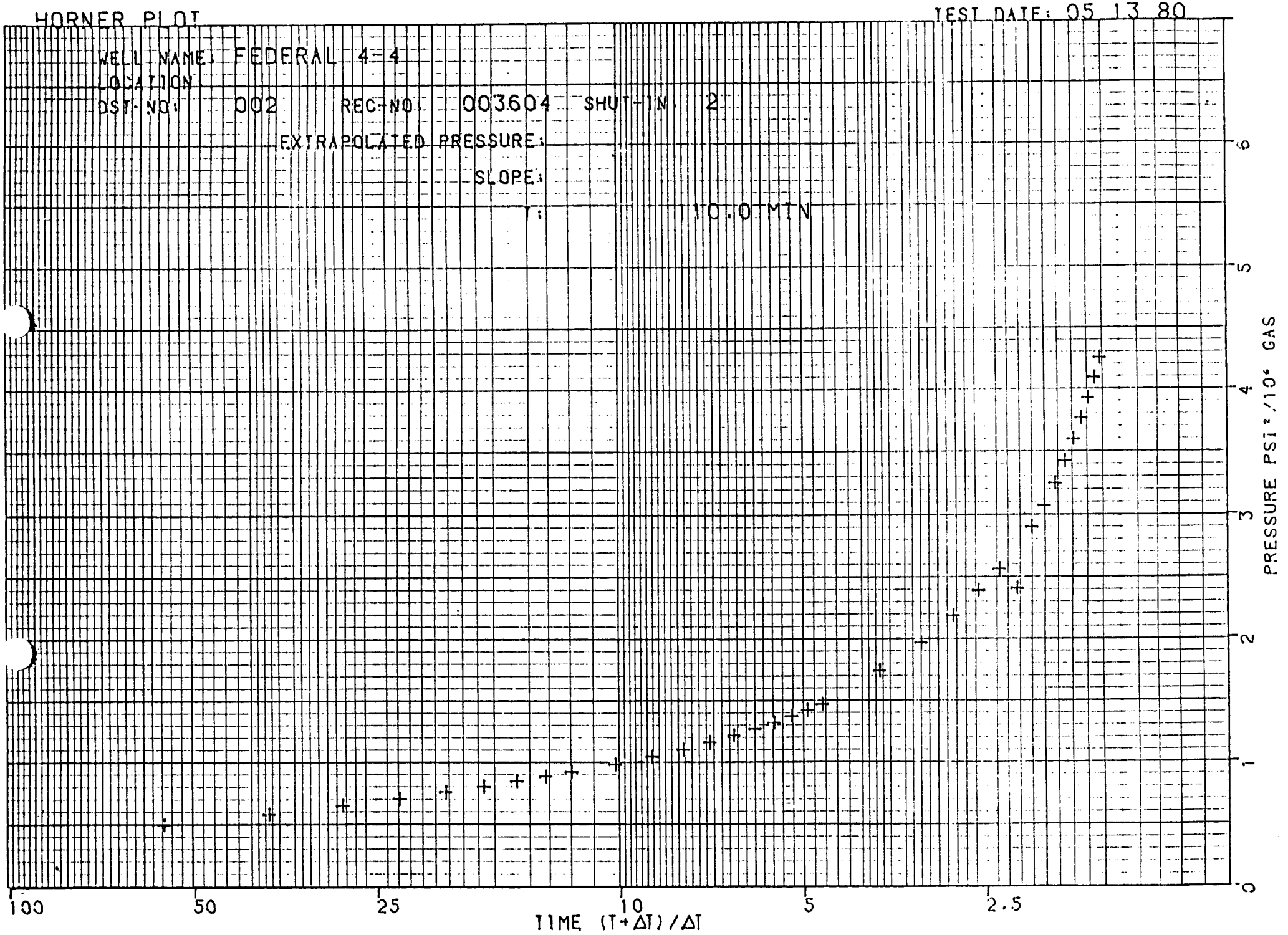
SECOND SHUT IN PRESSURE (GAS)

TIME (MIN) PHI	(T+PHI) /PHI	PRESSURE (PSI)	PRESSURE (PSI^2)/10^6
.0	.0000	649.0	.42120
1.0	111.0000	670.0	.44890
2.0	56.0000	713.0	.50837
3.0	37.6667	769.0	.59136
4.0	28.5000	813.0	.66097
5.0	23.0000	845.0	.71402
6.0	19.3333	876.0	.76738
7.0	16.7143	900.0	.81000
8.0	14.7500	923.0	.85193
9.0	13.2222	943.0	.88925
10.0	12.0000	962.0	.92544
12.0	10.1667	992.0	.98406
14.0	8.8571	1022.0	1.04448
16.0	7.8750	1050.0	1.10250
18.0	7.1111	1078.0	1.16208
20.0	6.5000	1103.0	1.21661
22.0	6.0000	1126.0	1.26788
24.0	5.5833	1148.0	1.31790
26.0	5.2308	1170.0	1.36890
28.0	4.9286	1190.0	1.41610
30.0	4.6667	1209.0	1.46168
40.0	3.7500	1316.0	1.73186
50.0	3.2000	1399.0	1.95720
60.0	2.8333	1475.0	2.17562
70.0	2.5714	1543.0	2.38085
80.0	2.3750	1598.0	2.55360
90.0	2.2222	1549.0	2.39940
100.0	2.1000	1700.0	2.89000
110.0	2.0000	1750.0	3.06250
120.0	1.9167	1800.0	3.24000
130.0	1.8462	1848.0	3.41510
140.0	1.7857	1895.0	3.59102
150.0	1.7333	1939.0	3.75972
160.0	1.6875	1980.0	3.92040
170.0	1.6471	2021.0	4.08444
180.0	1.6111	2061.0	4.24772

SLOPE: 15923066.00

EXTRAPOLATED PRESSURE: 2746.96


HORNER PLOT
TEST DATE: 05 13 80
WELL NAME: FEDERAL 4-4
LOCATION:
DST-NO: 002 REC-NO 003604 SHUT-IN
EXTRAPOLATED PRESSURE:
SLOPE:
T: 20.0 MIN
PRESSURE PSI²/10⁶ GAS
0
1
2
3
4
5
6
100
50
25
10
5
2.5
TIME (T+ΔT)/ΔT


HORNER PLOT
TEST DATE: 05 13 80
WELL NAME: FEDERAL 4-4
LOCATION:
DST-NO: 002 REC-NO: 003604 SHUT-IN: 2
EXTRAPOLATED PRESSURE:
SLOPE:
T: 110.0 MIN
PRESSURE PSI²/10⁶ GAS
0
1
2
3
4
5
6
100
50
25
10
5
2.5
TIME (T+ΔT)/ΔT

LYNES, INC.

Gas Volume Report

Operator Pacific Transmission Supply Co. Lease & No. Federal #4-4 DST No. 2

First Flow:				Second Flow:			
Min.	PSIG	Orifice Size	MCF/D	Min.	PSIG	Orifice Size	MCF/D
9	50	1/4"	89.7	5	2	1/4"	12.7
10	60	"	103.6	10	19	"	45.5
15	80	"	131.4	15	34	"	67.5
20	90	"	145.3	20	44	"	81.2
				25	47	"	85.5
				30	44	"	81.2
				35	40	"	75.8
				40	37	"	71.8
				45	35	"	69.0
				50	33	"	66.2
				55	30	"	61.9
				60	28	"	59.0
				65	27	"	57.7
				70	26	"	56.3
				90	24	"	53.2
				85	22	"	50.2
				90	21	"	48.7

Remarks:

Form 4

LYNES, INC.

Sampler Report

Company: Pacific Transmission Supply Co. Date: 5-13-80

Well Name & No.: Federal #4-4 Ticket No.: 20722

County: Uintah State: Utah

Test Interval: 8106-8240' DST No.: 2

Total Volume of Sampler: 2100 cc.

Total Volume of Sample: 1400 cc.

Pressure in Sampler: 300 psig

Oil: None cc.

Water: 1400 cc.

Mud: None cc.

Gas: .25 cu. ft.

Other: None

Sample R.W.: .69 @ 70°F = 8900 ppm. Cl.

Resistivity

Make Up Water R.W. 10.0+ @ _____ of Chloride Content _____ ppm.

Mud Pit Sample R.W. 10.0 @ 70°F of Chloride Content 6000 ppm.

Gas/Oil Ratio _____ Gravity _____ °API @ _____ °F

Where was sample drained On location

Remarks:

Form 5

LYNES, INC.

Distribution of Final Reports

Operator Pacific Transmission Supply Co. Well Name and No. Federal #4-4

Original: Pacific Transmission Supply Co., 717 17th St., 2300 Energy Center 1, Denver, Co. 80202 Attn: J.L. Wroble

1 copy: Pacific Transmission Supply Co., P.O. Box 3093, Casper, Wyoming 82602 Attn: D.E. Beardsley

1 copy: Pacific Transmission Supply Co., 245 Market St., Rm 1326, San Francisco, Ca. 94105 Attn: e.R. Henry

1 copy: Pacific Transmission Supply, 85 South, 200 East, Vernal, Utah 84078 Attn: R.J. Firth

1 copy: U.S.G.S., Conservations, Division, 2000 Administration Bldg., 1745 West, 1700 South, Salt Lake City, Utah 84104

1 copy: Ralph E. Davis & Associates, 100 Jefferson, Suite 2031, Houston, Tx. 77002 Attn: J. Milan Wege

1 copy: Ensearch Exploration, Inc., 1322 Metrobank Bldg., 475 17th St., Denver, Co. 80202 Attn: R.W. Sharp

Form 6

NOMENCLATURE (Definition of Symbols)

- Q = average production rate during test, bbls./day
- Q_g = measured gas production rate during test, MCF/day
- k = permeability, md
- h = net pay thickness, ft. (when unknown, test interval is chosen)
- μ = fluid viscosity, centipoise
- Z = compressibility factor
- T_f = reservoir temperature, ° Rankine
- m = slope of final SIP buildup plot, psig/cycle (psig^2/cycle for gas)
- b = approximate radius of investigation, feet
- r_w = wellbore radius, feet
- t_e = total flowing time, minutes
- P_o = Extrapolated maximum reservoir pressure, psig
- P_f = final flowing pressure, psig
- P.I. = productivity index, bbls./day/psi
- $P.I._t$ = theoretical productivity index with damage removed, bbl./day/psi
- D.R. = damage ratio
- E.D.R. = estimated damage ratio
- AOF = absolute open flow potential, MCF/D
- AOF_t = theoretical absolute open flow if damage were removed
- $\bar{z}$ = subsea depth
- W = water gradient based on salinity
- H_w = potentiometric surface

INTERPRETATION CALCULATIONS (OIL/WATER)

AVERAGE PRODUCTION RATE DURING TEST

$$Q = \frac{1440\ [\text{drill collar capacity} \times \text{recovery} + \text{drill pipe capac.} \times \text{recovery}]}{\text{initial flow time} + \text{final flow time}}$$

$$= \frac{1440\ [(\quad)(\quad) + (\quad)(\quad)]}{(\quad) + (\quad)}$$

$$= 1440\ (.0145 \text{ or } .0073)\frac{(\quad)}{(\quad)} = \text{\_\_\_\_\_ bbls./day}$$

Mud Expension = — _____ ft. (Drill Collar Conversion Is Considered)

FLUID PROPERTIES — Estimated Bottom Hole Temperature °

API Gravity @ 60° F. _____ ° Specific Gravity @ 60° F. — Est. Viscosity _____ cp

TRANSMISSIBILITY

$$\frac{kh}{\mu} = \frac{162.6Q}{m} = \frac{162.6\ (\quad)}{(\quad)} = \text{\_\_\_\_\_ md.-ft/cp}$$

IN SITU CAPACITY

$$kh = (\quad)(\quad) = \text{\_\_\_\_\_ md.-ft.}$$

AVERAGE EFFECTIVE PERMEABILITY — Estimated Pay Thickness Ft. / Actual Pay Thickness Ft.

$$k = \frac{(\quad)}{(\quad)} = \text{\_\_\_\_\_ md.}$$

PRODUCTIVITY INDEX

$$PI = \frac{Q}{P_o - P_f} = \frac{(\quad)}{(\quad) - (\quad)} = \text{\_\_\_\_\_ bbl./day-psi}$$

DAMAGE RATIO

$$D.R. = \frac{0.183\,(P_o - P_f)}{m} = \frac{0.183\ [(\quad) - (\quad)]}{(\quad)} = \text{\_\_\_\_\_}$$

PRODUCTIVITY INDEX WITH DAMAGE REMOVED

$$P.I._t = P.I. \times D.R. = (\quad)(\quad) = \text{\_\_\_\_\_ bbl./day-psi}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = \sqrt{kt_e} = \sqrt{(\quad)(\quad)} = \text{\_\_\_\_\_ ft.}$$

Drawdown Factor $= \frac{I.S.I.P. - F.S.I.P.}{I.S.I.P.} \times 100 = \frac{(\quad) - (\quad)}{(\quad)} \times 100 = $ _____ % (4% to 5% is considered serious or substantial)

Potentiometric Surface $= H_w = \bar{z} + \frac{P_o}{w}$ $\quad h_w = $ _____ $+ \frac{(\quad)}{(\quad)} = +$ _____ $\pm$ _____ ft.

INTERPRETATION CALCULATIONS (GAS)

$R(T_f) =$ _____ °

ESTIMATED GAS PROPERTIES — Estimated Bottom Hole Temperature °

Gravity @ 60° F. _____ Viscosity (Res.) _____ cp. — Compressibility Factor (Z) _____

TRANSMISSIBILITY — Measured D.S.T. Gas Rate = _____ mcf/d.

$$\frac{kh}{\mu} = \frac{1637\ Q_g\ ZT_f}{m} \qquad \frac{1637\ (\quad)(\quad)(\quad)}{(\quad)} = \text{\_\_\_\_\_ } \frac{\text{md.-ft.}}{\text{cp.}}$$

IN SITU CAPACITY

$$kh = (\quad)(\quad) = \text{\_\_\_\_\_ md.-ft.}$$

AVERAGE EFFECTIVE PERMEABILITY — Estimated Pay Thickness Ft. / Actual Pay Thickness Ft.

$$k = \frac{(\quad)}{(\quad)} = \text{\_\_\_\_\_ md.}$$

APPROXIMATE RADIUS OF INVESTIGATION

$$b = 0.02\sqrt{kt_eP_o} = 0.02\sqrt{(\quad)(\quad)(\quad)} = \text{\_\_\_\_\_ ft.}$$

ACTUAL CAPACITY

$$kh = \frac{3270\ Q_g \mu Z T_f \log(0.472 r_e/b)}{P_o^2 - P_f^2} = \frac{3270\ (\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad) - (\quad)} = \text{\_\_\_\_\_ md.-ft.}$$

ESTIMATED DAMAGE RATIO

$$E.D.R. = \frac{(P_o^2 - P_f^2)}{m\,[\log T_e + 2.65]}$$

E.D.R. = _____

ESTIMATED RANGE OF AOF POTENTIAL

$$\text{Max. AOF} = \frac{Q_g P_o^2}{P_o^2 - P_f^2} = \frac{(\quad)(\quad)}{[(\quad) - (\quad)]} = \frac{(\quad)}{(\quad)} = \text{\_\_\_\_\_ MCF/D}$$

$$\text{Min. AOF} = \frac{Q_g P_o}{\sqrt{P_o^2 - P_f^2}} = \frac{(\quad)(\quad)}{\sqrt{[(\quad) - (\quad)]}} = \frac{(\quad)}{(\quad)} = \text{\_\_\_\_\_ MCF/D}$$

ESTIMATED RANGE OF AOF POTENTIAL, DAMAGE REMOVED

Max. AOF_t = (Max. AOF) (D.R.) = (____)(____) = _____ MCF/D

Min. AOF_t = (Min. AOF) (D.R.) = (____)(____) = _____ MCF/D

Drawdown Factor $= \frac{ISIP - FSIP}{ISIP} \times 100 = \frac{(\quad) - (\quad)}{(\quad)} \times 100 = $ _____ % (4% to 5% is considered serious or substantial)

Potentiometric Surface $= H_w = \bar{z} + \frac{P_o}{W}$ $\quad H_w = $ _____ $+ \frac{(\quad)}{(\quad)} = +$ _____ $\pm$ _____ ft.

NATURAL GAS CORPORATION OF CALIFORNIA

OPERATIONS HEADQUARTERS
308 DURBIN CENTER BUILDING
145 SOUTH DURBIN STREET
P. O. BOX 3093
CASPER, WYOMING 82602
(307) 265-1027

May 29, 1980

GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 W. 1700 S.
Salt Lake City, UT 84104
Attn: E. W. Guynn

DIVISION OF OIL GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116
Attn: Mr. Frank Hamner

ENSERCH EXPLORATION, INC.
Metrobank Bldg., Suite 1322
Denver, CO 80202
Attn: Mr. R. W. Sharp

Re: PTS #4-4 Federal
Section 4, T10S, R23E
Uintah County, Utah

Gentlemen:

Please find attached your required number of copies of the Geological Well Report for the above referenced well.

Very truly yours,

Dee E. Beardsley/mel

DEE E. BEARDSLEY
MANAGER OF OPERATIONS

DEB/mel

cc: JCOsmond
ERHenry
RJFirth
Degolyer & MacNaughton
CTClark (cover letter only)

NATURAL GAS CORPORATION OF CALIFORNIA
OPERATIONS HEADQUARTERS
308 DURBIN CENTER BUILDING
145 SOUTH DURBIN STREET
P. O. BOX 3093
CASPER, WYOMING 82602
(307) 265-1027

May 30, 1980

Mr. E. W. Guynn
GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 W. 1700 S.
Salt Lake City, UT 84104

Mr. Frank Hamner
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Re: PTS #4-4 Federal Southman Canyon
Sec. 4, T10S, R23E
Uintah Co., Utah

Gentlemen:

I am enclosing your required number of copies of the Hydrostatic Pressure Test, Blowout Control Equipment run by Yellow Jacket Tools and Services, Inc. on April 16, 1980, for the above referenced well.

Yours truly,

W. A. Ryan
Regulatory Coordinator

/pv

Encl.

cc: RJFirth

NATURAL GAS CORPORATION OF CALIFORNIA
OPERATIONS HEADQUARTERS
308 DURBIN CENTER BUILDING
145 SOUTH DURBIN STREET
P. O. BOX 3093
CASPER, WYOMING 82602
(307) 265-1027

GEOLOGICAL WELL REPORT

PACIFIC TRANSMISSION SUPPLY COMPANY

PTS #4-4 FEDERAL

SECTION 4, TOWNSHIP 10 SOUTH, RANGE 23 EAST

UINTAH COUNTY, UTAH

Submitted by: John Fleming, Geologist
Natural Gas Corporation of Calif.
May 29, 1980

RECEIVED
JUN 2 1980
DIVISION OF
OIL, GAS & MINING

WELL DATA

Operator: Pacific Transmission Supply Company
1613 FSL and 1329 FEL

Legal Location: NW SE Section 4, T10S, R23E

Well Name: PTS #4-4 Federal

County and State: Uintah County, Utah

Elevations: GR 5316' KB 5330'

Contractor: Olsen Rig #2

Spud Date: 3/30/80 Dry Hole 4/4/80 Drilling Contractor:

Surface Casing: 13-3/8" to 195, 9-5/8" to 2765, 7-7/8" to 8670

Hole Size: 17-1/2" to 195'; 12-1/4" to 2765'

Fluids Contractor: American Mud Company

Drillstem Tests:
#1 6188' to 6237' 9. MCF
#2 8106' to 8240' 53. MCF
#3 8372' to 8433' No gas to surface

Logging Data: 208' to 2765' DI - SFL, FDC - CNL, BHC, CBL
2765' to 8650' DI - SFL/GR & SP, FDC - CNL/GR, BHC Sonic/caliper

Mud Logging: Rocky Mountain Geo-Engineering Company

Cores:

Total Depth: 8670' Driller
8674' Logger

Ceased Drilling: May 19, 1980

CHRONOLOGICAL WELL HISTORY

Date	Drilled to	Hrs. Drilling	Activity
4/04/80	195'	10	Drill out below surface casing at 8:00 PM.
4/05/80	468'	9-1/4	Pickup Drill collars.
4/06/80	1139'	22-1/2	Drilling 12-1/4" Hole.
4/07/80	1532'	22	Lost returns at 1450'.
4/08/80	1573'	3	Set two plugs at 1573'.
4/09/80	1573'	0	Set two more plugs.
4/10/80	1804'	11-3/4	Drill cement, Lost returns at 1804', Set plug #5.
4/11/80	1804'	0	Set plugs #6 & 7, drilling cement.
4/12/80	1948'	13	Lost Returns at 1651'-1750', mixed LCM, drilling.
4/13/80	2232'	20-1/4	Drilling ahead.
4/14/80	2616'	21-1/4	Drilling, BGG 200-300 units.
4/15/80	2768'	16-1/4	Trip for Logs.
4/16/80	2768'	0	Completed Logs.
4/17/80	2768'	0	Running 9-5/8" casing.
4/18/80	2909'	6	Run CBL, Drilled cement.
4/19/80	3510'	22-1/4	Drilling ahead BGG 5 units.
4/20/80	4169'	22	Drilling 7-7/8" hole.
4/21/80	4580'	22-1/4	Drilling.
4/22/80	4911'	22-1/2	Drilling.
4/23/80	5055'	9-1/2	Trip for Bit #3, Rig Repair.
4/24/80	5436'	23-1/4	Drilling.
4/25/80	5749'	21	Drilling, worked tight hole.
4/26/80	5920'	17	Trip for hole in pipe.
4/27/80	6141'	21-1/2	Drilling with Bit #4.
4/28/80	6237'	8	DST #1, 6188'-6237'.
4/29/80	6281'	6-1/2	Complete test, Ream 40'.
4/30/80	6425'	15-1/2	Trip for Hole in pipe.
5/01/80	6653'	22-3/4	Drilling, BGG 60 units.
5/02/80	6889'	23-1/4	Drilling, BGG 80 units.
5/03/80	7098'	23-1/4	Drilling ahead.
5/04/80	7190'	11	Trip for Hole in Pipe.
5/05/80	7297'	11-1/2	Trip in with Bit #5.
5/06/80	7461'	23	Drilling ahead BGG, 600 units.
5/07/80	7696'	23-1/4	Drilling ahead.
5/08/80	7907'	23-1/4	Drilling 300 units BGG.
5/09/80	8038'	17	Prepare to trip for Bit #6, 4' flare.
5/10/80	8042'	1-1/2	Drilling.
5/11/80	8240'	12	Drilling, Lost mud through Gas Buster.
5/12/80	8240'	0	Prepare for DST #2.
5/13/80	8240'	0	DST #2, 8106'-8240'(134').
5/14/80	8290'	8-1/2	Resume Drilling.
5/15/80	8413'	23-1/4	Drilling.
5/16/80	8433'	2-1/2	DST #3, 8372'-8433'.
5/17/80	8490'	12	Resume Drilling.

CHRONOLOGICAL WELL HISTORY (Continued)

5/18/80	8568'	14-1/2	Trip for Hole in Pipe.
5/19/80	8660'	23-1/4	Drilling ahead.
5/20/80	8670'	1-3/4	Prepare to Log.
5/21/80	8670'	0	Logging.
5/22/80	8670'	0	Condition Hole, Wait on orders.
5/23/80	8670'	0	Set casing at 8400'.
5/24/80	8670'	0	Released rig at 12:00 Midnight.

BIT RECORD

BIT NO.	TYPE	MFG	IN	OUT	HOURS	FOOTAGE
#1	M84F	SEC	207'	1573'	56-3/4	1366'
#1	M84F	SEC	1573'	1804'	11-3/4	231'
#1	M84F	SEC	1804'	2768'	71	964'
#2	F45	STC	2763'	4949'	97	2186'
#3	J44	HTC	4949'	6237'	98-1/4	1288'
#4	J44	HTC	6237'	7130'	95-1/4	893'
#5	J33	HTC	7130'	8038'	105	908'
#6	F45	STC	8038'	8433'	53	401'
#7	M84F	SEC	8433'	8670'	52-1/2	237'

DEVIATION SURVEY

Depth	Deviation
420'	3/4 deg.
710'	3/4 deg.
980'	1-1/4 deg.
1140'	1-1/4 deg.
1320'	1 deg.
3190'	1-1/2 deg.
3720'	1-1/2 deg.
4240'	1-1/2 deg.
7100'	2-1/4 deg.

September 4, 1980

Pacific Transmission Supply
P.O. Box 3093
Casper Wyomoing 82602

Re: Well No. Federal 4-4
Sec. 4, T. 10S, R. 23E.
Uintah County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, and forward it to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS & MINING

Janice Tabish

JANICE TABISH
CLERK-TYPIST

November 25, 1980

Pacific Transmission Supply
P.O. Box 3093
Casper Wyoming 82602

RE: Well No. Federal #4-4
Sec. 4, T. 10S, R. 23E.,
Uintah County, Utah
Second Request

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

BARBARA HILL
CLERK TYPIST

/bjh

Enclosures: Forms

NATURAL GAS CORPORATION OF CALIFORNIA

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

December 3, 1980

State of Utah
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, UT 84116

Re: Well no. Federal 4-4
Section 4, T10S, R23E
Uintah County, Utah
Well Completion Report and Log

Gentlemen:

Reference is made to your second request letter of November 25, 1980 regarding the Well Completion Report and Log for the Federal #4-4 well. This is to advise that completion operations have not as yet commenced on this well.

A Well Completion Report and Log will be submitted when completion operations are finalized.

Very truly yours,

Karla Higginson

Karla Higginson
Secretary

June 23, 1981

Pacific Transmission Supply Company
Attention: R. J. Firth
P. O. Box 3093
Casper, Wyoming 82602

Re: Well No. Federal #4-4
Sec. 4, T. 8OS, R. 23E
Uintah County, Utah
Last Request

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Failure to provide this report will result in denial of all future applications for permit to drill from this office.

Your prompt attention to the above will be greatly appreciated!

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

Cleon B. Feight
Director

/lm

Enclosure: Forms

NATURAL GAS CORPORATION OF CALIFORNIA

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

July 2, 1981

Mr. Cleon B. Feight
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, UT 84116

Re: Well no. 4-4 Federal
NW SE Section 4, T10S, R23E
Uintah County, Utah
Lease no. U-33433

Dear Mr. Feight:

Reference is made to your letter of June 23, 1981 regarding submittal of the "Well Completion Report and Log", Form OGC-3 for well no. 4-4. Completion operations have not been conducted on this well and the well's present status is waiting on completion. Completion operations are scheduled to begin within the month of July, and the necessary information will be forthcoming from this office.

If further information is required, please contact this office.

Sincerely,

Karla Hanberg

Karla Hanberg
Secretary

/KH

Encls.

cc: Operations Supt. - Denver

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 4, 1982

Natural Gas Corporation of Cal.
85 South 200 East
Vernal, Utah 84078

Re: Well No. Federal 4-4
Sec. 4, T. 10S, R. 23E
Uintah County, Utah

Well No. Devil's Playground Federa 23-17
Sec. 17, T. 9S, R. 24E
Uintah County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

NATURAL GAS CORPORATION

FEB 05 1982

VERNAL OFFICE

February 4, 1982

Natural Gas Corporation of Cal.
85 South 200 East
Vernal, Utah 84078

Re: Well No. Federal 4-4
Sec. 4, T. 10S, R. 23E
Uintah County, Utah

Well No. Devil's Playground Federa 23-17
Sec. 17, T. 9S, R. 24E
Uintah County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Clerk Typist

NATURAL GAS CORPORATION OF CALIFORNIA

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

February 9, 1982

Mr. E. W. Guynn
Geological Survey-Conservation Div.
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, UT 84104

Ms. Cari Furse
State of Utah
Natural Resources and Energy
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

Mr. Bob Gilmore
DeGolyer & MacNaughton
No. 1 Energy Square
Dallas, TX 75206

Mr. Richard Smith
Enserch Exploration, Inc.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Enserch Exploration, Inc.
909 South Meridian, Suite 608
Oklahoma City, OK 73128

Re: NGC #4-4 Federal
NW SE Section 4, T.10S, R.23E
Uintah County, Utah

Gentlemen:

Attached are copies of Form 9-331, Sundry Notices and Reports on Wells, Notification of Well Status, for the above referenced well.

Yours truly,

Rick Canterbury

Rick Canterbury
Associate Engineer

/kh

Attachment

cc: Operations
E. R. Henry
C. T. Clark (Cover Letter Only)

Form 9-331
Dec. 1973

Form Approved.
Budget Bureau No. 42-R1424

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well ☐ gas well ☒ other

2. NAME OF OPERATOR
Natural Gas Corporation of California

3. ADDRESS OF OPERATOR
85 South 200 East, Vernal, UT 84078

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 1613' FSL, 1329' FEL, NW SE
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

5. LEASE
U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
4-4

10. FIELD OR WILDCAT NAME

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 4, T.10S, R.23E

12. COUNTY OR PARISH
Uintah

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5328'

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	☐		☐
FRACTURE TREAT	☐		☐
SHOOT OR ACIDIZE	☐		☐
REPAIR WELL	☐		☐
PULL OR ALTER CASING	☐		☐
MULTIPLE COMPLETE	☐		☐
CHANGE ZONES	☐		☐
ABANDON*	☐		☐
(other) Notification of Well Status			

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilling operations were completed on this well in the spring of 1980. At present this well has not been completed for production.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Rick Canterbury TITLE Associate Engr. DATE February 9, 1982
Rick Canterbury

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

cc: USGS; Div. Oil, Gas & Mining; Operations; ERHenry; DeGolyer; Enserch

*See Instructions on Reverse Side

NATURAL GAS CORPORATION OF CALIFORNIA

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

February 10, 1982

Ms. Cari Furse
State of Utah Natural Resources and Energy
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

Re: NGC #4-4 Federal, Lease No. U-33433
NW SE Section 4, T.10S, R.23E
Uintah County, Utah

NGC #23-17 Federal, Lease No. U-31266
NE SW Section 17, T.9S, R.24E
Uintah County, Utah

Dear Ms. Furse:

Attached are copies of Form OGC-1b, Sundry Notices and Reports on Wells, Notification of Change of Operator from Pacific Transmission Supply Co. to Natural Gas Corporation of California, for the above referenced wells.

Sincerely,

Rick Canterbury

Rick Canterbury
Associate Engineer

/kh

Attachment

cc: Operations
E. R. Henry

Form OGC-1b

SUB. IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Natural Gas Corporation of California

3. ADDRESS OF OPERATOR: 85 South 200 East, Vernal, UT 84078 Telephone 801-789-4573

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW SE Section 4, T.10S, R.23E

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T.10S, R.23E

14. PERMIT NO.:

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5328' KB

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Notify of Change of Operator	☒			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

This is to notify you that the operator of the subject well has changed from Pacific Transmission Supply to Natural Gas Corporation of California.

RECEIVED
FEB 11 1982
DIVISION OF OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED Rick Canterbury Rick Canterbury TITLE Associate Engineer DATE 2/10/82

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

cc: Operations; E. R. Henry

*See Instructions on Reverse Side

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

March 15, 1983

Natural Gas Corporation of California
85 South 200 East
Vernal, Utah 84078

Re: Well No. Devil's Plygr Fed. # 23-17
Sec. 17, T. 9S, R. 24E.
Uintah County, Utah

Well No. Federal # 4-4
Sec. 4, T. 10S, R. 23E.
Uintah County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned wells are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

We will be happy to acknowledge receipt of response to this notice if you will include an extra copy of the transmittal letter with a place for our signature, and a self addressed envelope for the return. Such acknowledgement should avoid unnecessary mailing of a firm second notice from our agency.

Your prompt attention to the above will be greatly appreciated.

Respectfully,

DIVISION OF OIL, GAS AND MINING

Cari Furse

Cari Furse
Well Records Specialist

CF/cf
Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 22 1983

Natural Gas Corporation of California
85 South 200 East
Vernal, Utah, 84078

Re: Well No. Fed. #4-4
1613' FSL, 1329' FEL NW SE
Sec. 4, T. 10S, R. 23E.
Uintah County, Utah

Gentlemen:

This letter is to advise you that the Well Completion or Recompletion Report and Log for the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3, in duplicate, and forward them to this office as soon as possible.

**You are in violation with the above rule. If you wish to continue developing business in the State of Utah, compliance with pertinent rules and regulations is essential. Further delay in your attention to the above matter may result in punitive action. Please submit the required information as stated above within fifteen (15) days.

Respectfully,

Claudia Jones

Claudia Jones
Well Records Specialist

CJ/cj
Enclosure

Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPL E* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

10

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other Pending Completion

2. NAME OF OPERATOR
Natural Gas Corporation of California

3. ADDRESS OF OPERATOR
85 South 200 East, Vernal, UT 84078 Telephone 801-789-4573

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 1613' FSL, 1329' FEL, NW SE Section 4, T.10S., R.23E.
At top prod. interval reported below
At total depth

5. LEASE DESIGNATION AND SERIAL NO.
U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Federal

9. WELL NO.
4-4

10. FIELD AND POOL, OR WILDCAT

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Section 4, T.10S., R.23E.

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
43-047-30632	9/28/79	Uintah	Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
4/3/80	5/19/80	SI Pending Completion	5316' GL	

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8670'	NA		→	0-TD	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Not completed.

25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
DI-SFL, FDC-CNL, BHC, CBL

27. WAS WELL CORED
No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8	48	195	17-1/2	250 sx Class B	None
9-5/8	36	2768	12-1/4	1100 sx Class G	None
5-1/2	17	1969			
5-1/2	20	8406	7-7/8	900 sx Class G	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)
None

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
None	None	SI Pending Completion

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS
None

RECEIVED
JAN 12 1984
DIV. OF OIL, GAS & MINING

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED Wm Ryan TITLE DATE 1/5/84
W. A. Ryan

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Green River	Surface	
Parachute Creek	1324	+4006
"H" Marker	2612	+2718
Wasatch Trans.	4106	+1224
Wasatch	4820	+ 510
"Y" Marker	5733	- 403
Mesaverde		
(Farrer Facies)	6072	- 742
(Nelson Coaly F)	6730	-1400
Buck Tongue Shale	8282	-2952
Castlegate	8371	-3041
Mancos Shale	8551	-3221

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636
GPO 870-401

cc: BLM; Div. OG&M; Enserch; DeGolyer; Operations; CTClark; ERHenry; SFurtado; RBoschee; PSmith; JMKunz; MClarke; IChai

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 7, 1984

Natural Gas Corporation of California
85 South 200 East
Vernal, Utah 84078

Gentlemen:

Re: Well No. Federal 4-4 - Sec. 4, T. 10S., R. 23E.
Uintah County, Utah - API #43-047-30632

The above referred to well has been under an operation suspended status for six months or longer. Please inform this office of the current status of this well location or what operations are currently being performed on this well. Enclosed is Form OGC-1b, "Sundry Notices and Reports on Wells" that you may use to inform our office regarding this matter.

Thank you for your prompt attention to the above matter.

Sincerely,

Claudia Jones

Claudia Jones
Well Records Specialist

clj
Enclosure
cc: Dianne R. Nielson
Ronald J. Firth
John R. Baza
File
00000012/9

Natural Gas
Corporation of
California

NGC NGC NGC NGC NGC NGC NGC NGC NGC NGC NGC NGC

November 15, 1984

Bureau of Land Management
Branch of Fluid Minerals
Vernal District Office
170 South 500 East
Vernal, UT 84078

Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, UT 84114

Mr. John Baker
DeGolyer & MacNaughton
No. 1 Energy Square
Dallas, TX 75206

Enserch Exploration, Inc.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Enserch Exploration, Inc.
909 South Meridian, Suite 608
Oklahoma City, OK 73128

Re: NGC #4-4 Federal
NW SE Section 4, T.10S., R.23E.
Uintah County, UT

Gentlemen:

Attached are copies of Form 3160-5, Sundry Notices and Reports on Wells, Report of Well Status, for the subject well.

Yours truly,

William A Ryan

W. A. Ryan
Petroleum Engineer

/kh

Attachment

cc: H. Myers
Land Dept.
L. Jorgensen
S. Furtado

85 South 200 East
Vernal, Utah 84078
(801) 789-4573

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Natural Gas Corporation of California

3. ADDRESS OF OPERATOR: 85 South 200 East, Vernal, UT 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 1613' FSL, 1329' FEL, NW¼ SE¼

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 4, T.10S., R.23E.

14. PERMIT NO.: 43-047-30632

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5316' GR

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Well Status			X
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Operator reports the status as "shut-in" pending reevaluation of economic capability.

"Operations Suspended"

RECEIVED
NOV 20 1984
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED William A Ryan TITLE Petroleum Engineer DATE Nov. 15, 1984

William A. Ryan

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-5
(November 1983)
(Formerly 9-331)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR: Natural Gas Corporation of California

3. ADDRESS OF OPERATOR: 85 South 200 East, Vernal, UT 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface:
1613' FSL 1329' FEL NW SE
Section 4, T.10S., R.23E.

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Federal

9. WELL NO.: 4-4

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 4, T.10S., R.23E.

14. PERMIT NO.: 43-047-30632

15. ELEVATIONS (Show whether DF, RT, GR, etc.):

12. COUNTY OR PARISH: Uintah

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other) Request Temporary Surface Pit	X			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Operator requests an unlined surface pit per NTL-2B, Sec. VI. The subject pit would be used as a blow down pit when the well is flow tested.

If you require additional information, please contact me at our Vernal office - telephone 789-4573.

RECEIVED
NOV 23 1984
DIVISION OF
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED William A. Ryan TITLE Petroleum Engineer DATE November 15, 1984
William A. Ryan

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ACCEPTED
~~APPROVED~~ BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 12/20/84
BY: John R. Baza

Federal approval of this action is required before commencing operations.

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

COMPANY: NGC UT ACCOUNT # _____ SUSPENSE DATE: _____

TELEPHONE CONTACT DOCUMENTATION

CONTACT NAME: BILL RYAN 1- 789- 4573

CONTACT TELEPHONE NO.: _____

SUBJECT: STATUS OF FED 4-4 (43-047-30632) 10S, 23E, 4

(Use attachments if necessary)

RESULTS: STILL HAS NEVER BEEN PERFED OR OTHERWISE COMPLETED.
NO IMMEDIATE PLANS.

★ WELL SHOULD RETAIN AN OPNS SUSPENDED (DRILLING) STATUS.

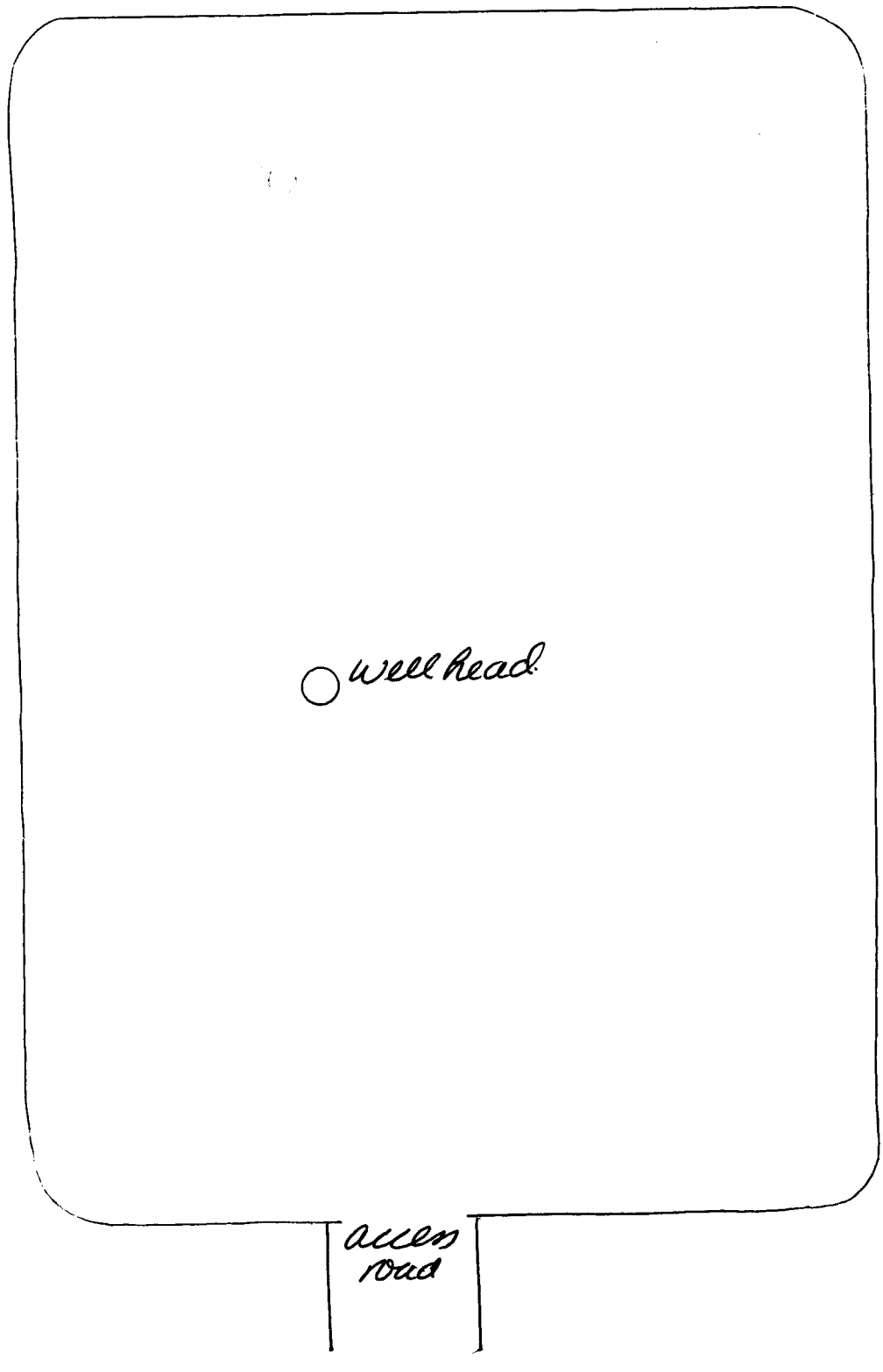
(Use attachments if necessary)

CONTACTED BY: [signature]

DATE: 2-2-87

Fld # 4-4 | Sec 4, 10S, 23E | [illegible] | 14 July 88

25 — NAT. GAS CORP.



STATE OF UTAH
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM - DOGM FORM 6

RECEIVED
MAR 09 1989
DIVISION OF
OIL, GAS & MINING

OPERATOR Phoenix Hydrocarbons
ADDRESS P.O. Box 2802
Midland, TX 79702

OPERATOR CODE N0985
PHONE NO. 915,683-5449

OPERATORS MUST COMPLETE FORM UPON SPUDDING NEW WELL OR WHEN CHANGE IN OPERATIONS OR INTERESTS NECESSITATES CHANGE IN EXISTING ENTITY NUMBER ASSIGNMENT.

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
A	10690		4304730632	Southman Canyon 4-4	NW SE	4	10S	23E	Uintah		1/1/89
COMMENTS:	* Single entity well. Not in a Unit. Does not share tank battery with any other well. 4-3-89 oper. chg from NGC Energy Co. eff. 1/1/89. fcR										
A	10689		4304730856	Southman Canyon 1-5	SE NW	5	10S	23E	Uintah	3/19/81	1/1/89
COMMENTS:	* Single entity well. Not in a Unit. Does not share tank battery with any other well. 4-3-89 oper. chg. from NGC Energy Co. eff. 1/1/89. fcR										
COMMENTS:											
COMMENTS:											
COMMENTS:											

ACTION CODES:
- A - ESTABLISH NEW ENTITY FOR NEW WELL (SINGLE WELL ONLY)
- B - ADD NEW WELL TO EXISTING ENTITY (GROUP OR UNIT WELL)
- C - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO ANOTHER EXISTING ENTITY
- D - RE-ASSIGN WELL FROM ONE EXISTING ENTITY TO A NEW ENTITY
- E - OTHER (EXPLAIN IN COMMENTS SECTION)

(SEE INSTRUCTIONS ON BACK OF FORM)

Kim C. Wilkinson
SIGNATURE

Prod. Sec.
TITLE

3/6/89
DATE

Form OGC-1b

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

5. LEASE DESIGNATION AND SERIAL NO.: U-33433

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1. OIL WELL ☐ GAS WELL ☐ OTHER

7. UNIT AGREEMENT NAME:

2. NAME OF OPERATOR: Phoenix Hydrocarbons, Inc.

8. FARM OR LEASE NAME: Federal

3. ADDRESS OF OPERATOR: P.O. Box 2802, Midland, TX 79702

9. WELL NO.: 4-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface: 1613' FSL, 1329' FEL NWSE

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APR 03 1989
DIVISION OF OIL, GAS & MINING

10. FIELD AND POOL, OR WILDCAT:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 4, T10S, R23E

14. PERMIT NO.: 43-047-30632

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 5316' GL

12. COUNTY OR PARISH: Uintah

13. STATE: UT

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other) Change of Operator	XX			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

CHANGE OF OPERATOR

Effective January 1, 1989, Phoenix Hydrocarbons, Inc. (N0985) assumed operations from NGC Energy Co. (N0700).

18. I hereby certify that the foregoing is true and correct

SIGNED Kim C. Wilkinson TITLE Production Secretary DATE 3/31/89

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGC-3

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

56 64 01

10

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

2. NAME OF OPERATOR: Phoenix Hydrocarbons, Inc.

3. ADDRESS OF OPERATOR: P.O. Box 2802, Midland, TX 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1613' FSL, 1329' FEL, NWSE
At top prod. interval reported below
At total depth

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JUL 31 1989
DIVISION OF OIL, GAS & MINING

5. LEASE DESIGNATION AND SERIAL NO.: U-33433
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Federal
9. WELL NO.: 4-4
10. FIELD AND POOL, OR WILDCAT: Southman Canyon
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 4, T-10-S, R-23-E
12. COUNTY OR PARISH: Uintah
13. STATE: Utah
14. PERMIT NO.: 43-047-30632
DATE ISSUED: 9/28/79

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
4/30/80	5/29/80	5/27/89	5316' GL	5315'

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
8670	8612	n/a	→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: 6939-7383 Mesa Verde

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: DI-SFL, FDC-CNL, CBL

27. WAS WELL CORED: No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48	195	17-1/2	250 sx Class B	None
9-5/8	36	2768	12-1/4	1100 sx Class G	None
5-1/2	17	1969			
5-1/2	20	8406	7-7/8	900 sx Class G	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
none				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	7183	

31. PERFORATION RECORD (Interval, size and number)
6939-7383; .37"; 18 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6939-7383	4000 gals. 7-1/2% NEFE, 51,000 gals. gelled KCL water and 90,000# 20/40 sand.

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
7/11/89	Flowing	Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
7/20/89	24	16/64		.5	410	4	820,000/1

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
1100	1400		.5	410	4	49.5

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): Sold
TEST WITNESSED BY: DeNile Smuin

35. LIST OF ATTACHMENTS: None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Lat M. Hoehn TITLE Operations Manager DATE 7/28/89

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement"*: Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.

OIL AND GAS

DRN	JRB	DTS	
RJF	GLH	SLS	

1- TAS
2- MICROFILM
3- FILE

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Green River	Surface	
Parachute Creek	1324	+4006
"H" Marker	2612	+2718
Wasatch Trans.	4106	+1224
Wasatch	4820	+ 510
"Y" Marker	5733	- 403
Mesaverde		
(Farrer Facies)	6072	- 742
(Nelson Coaly F)	6730	-1400
Buck Tongue Shale	8282	-2952
Castlegate	8371	-3041
Mancos Shale	8551	-3221

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, Utah

5-16-80	TD 8433'. Tripping to test. Mud wt. 11.2#/gal.
5-17-80	TD 8490'. Drilling. DST no. 3: 8372'-8433'. Recovered 110' drlg. mud, NGTS. FSIP 640#.
5-18-80	TD 8568'. Drilling. Tripped for washed out drill collars. Mud wt. 11.4#/gal.
5-19-80	TD 8660'. Drilling. Mud wt. 11.0#/gal.
5-20-80	TD 8670'. Logging. Mud wt. 11.0#/gal.
5-21-80	TD 8670'. Circulating and waiting on orders. Completed logging. Mud wt. 11.0#/gal.
5-22-80	TD 8670'. Circulating and waiting on orders. Mud wt. 11.0#/gal.
5-23-80	TD 8670'. Running 5-1/2" production casing. Mud wt. 11.1#/gal.
5-24-80	TD 8670'. R.D. rotary drilling rig. Ran 204 jts. 5-1/2", 17.0# N80 and 20.0# K55 production casing. Land casing at 8400' and cemented with 900 sacks Thixotropic cement and 100 sacks Class G cement. Good circulation. WOC and set casing slips. Rotary drlg. rig released at 12:00 midnight 5-23-80.

Pacific Transmission Supply Company
PTS #4-4 Federal
Uintah County, Utah

4-28-80 TD 6281'. Drilling.
DST no. 1 6187'-6237'. Final gas volume 8.95 MCF/D.

4-29-80 TD 6425'. Drilling.
Tripped for hole in drill collars.

4-30-80 TD 6653'. Drilling.
DB: 6618'-37' 450 units gas.

5-1-80 TD 6889'. Drilling
DB: 6687'-97' 220 units gas, 6713'-18' 230 units gas, 6739'-54' 590 units gas, 6756'-87' 350 units gas and 6821'-33' 650 units gas.

5-2-80 TD 7098'. Drilling.
DB: 6939'-50' 660 units gas, 6975'-94' 1000 units gas and 7046'-59' 1200 units gas.

5-3-80 TD 7190'. Tripping.
Tripped for bit.

5-4-80 TD 7297'. Drilling.
Tripped for hole in drill collars.
DB: 7260'-66' 570 units gas, 7280'-95' 830 units gas.

5-5-80 TD 7461'. Drilling.
DB: 7386'-91' 1000 units gas.

5-6-80 TD 7696'. Drilling.
DB: 7469'-77' 1000 units gas, 7567'-78' 1100 units gas, 7602'-07' 1250 units gas.

5-7-80 TD 7907'. Drilling.

5-8-80 TD 8038'. Circ. & mixing mud. Prep. to trip for new bit.

5-9-80 TD 8042'. Drilling.
Tripped for new bit.

5-10-80 TD 8240'. Circ. & mixing mud. DB: 8104'-26'.

5-11-80 TD 8240'. Circ. & mixing mud. Preparing to run DST no. 2.

5-12-80 TD 8240' Circ. & mixing mud. Mud wt. 11.3#/gal. vis. 50 secs.
Prep. to trip out for test.

5-13-80 TD 8240'. Testing. DST no. 2: 8106'-8240'.

5-14-80 TD 8290'. Drilling. DST no. 2: 8106'-8240'. Recovered 180' drilling mud and 1290' gas cut water. FSIP 2109#. Final gas volume 53 MCF/D.

5-15-80 TD 8413'. Drilling. DB: 8370'-78' & 8400'-24'. Mud wt. 11.0#/gal.

Phoenix Hydrocarbons, Inc. (N0985)

RECEIVED
JUL 05 1991
DIVISION OF
OIL GAS & MINING

July 2, 1991

Lisha Romero
Division of Oil, Gas, & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: Change of Operator

Dear Lisha:

As per our telephone conversation on July 1, 1991, Phoenix Hydrocarbons, Inc. (PHI) hereby gives notice that effective July 1, 1991, Phoenix Hydrocarbons Operating Inc. (PHOC) will begin to operate wells previously operated by PHI. Attached you will find a list of these properties by field which includes API numbers and Utah Entity numbers.

Please assign PHOC a Utah Account Number for filing taxes and monthly reporting. If you should have any questions, please call. Thank you.

Sincerely,

Rhonda Patterson

Rhonda Patterson

encl.

*910711 Address is the same per Rhonda Patterson. lcr

415 W. Wall, Suite 703 • P.O. Box 2802 • Midland, Texas 79702 • (915) 682-1186

PHOENIX HYDROCARBONS UTAH FIELDS

AS OF 3/31/91

WALKER HOLLOW FIELD #700	API - NUMBER	UTAH ENTITY #
U-02651		
McLish #1	43-047-20280	02760
McLish #2	43-047-30011	02760
McLish #3	43-047-30027	02760
McLish #4	43-047-30030	02760
Pan American Fed #2	43-047-30038	02760
WalkerHollow U #6	43-047-31034	02760
WalkerHollow UJ-8	43-047-31092	02760

RECEIVED
JUL 05 1991
DIVISION OF
OIL GAS & MINING

NATURAL BUTTE FIELD #630		
U-33433		
Southman Canyon #1-5	43-047-30856	10689
Southman Canyon #4-4	43-047-30632	10690
Southman Canyon #4-5	43-047-30633	06131

PLEASANT VALLEY FIELD #115		
FEE		
Pleasant Valley 24-32	43-013-30888	04970
Pleasant Valley 23-22	43-013-30845	04965

8 MILE FLAT NORTH FIELD #590		
ML-22057		
Gulf State 36-11	43-047-31350	00040
Gulf State 36-12	43-047-31864	11002
Gulf State 36-13	43-047-31345	00045
Gulf State 36-22	43-047-31892	11095
Pariette Draw 28-44-FEE	43-047-31408	04960

HORSESHOE BEND FIELD #620		
U-075939		
Baser Draw 5-1	43-047-31833	10862
Baser Draw 6-1	43-047-31834	10863
Baser Draw 6-2	43-047-31859	10967
Federal Miller #1- U-0136484	43-047-30034	02750
Wolf Government #1	43-047-15609	02755
FEDERAL 4-3-L- U-66401	43-047-31910	99999 (ADDED TO LIST BY DOGM)

WILDCAT FIELD #001		
Coors 14-1-D - U-65223	43-047-31304	11193

UNDESIGNATED FIELD #002		
E. Gusher 15-1-A - U-58097	43-047-31900	11122
Federal 5-5-H - UTU-66401	43-047-31903	11138

NOTE: WE NEED TO CALL EACH QUARTER TO THE DIVISION OF OIL, GAS, & MINING TO VERIFY FIELD'S THAT HAVE BEEN "UNDESIGNATED" FOR FIELD ASSIGNMENT

Form 3160-5
(December 1989)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED

SUBMIT IN TRIPLICATE

SEP 23 1992

DIVISION OF
OIL GAS & MINING

5. Lease Designation and Serial No.: U-33433

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Southman Canyon 4-4

2. Name of Operator: Phoenix Hydrocarbons Operating Corp.

9. API Well No.: 4304730632

3. Address and Telephone No.: P. O. Box 2802, Midland, Texas 79702 (915) 682-1186

10. Field and Pool, or Exploratory Area: Natural Butte Field #630

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Section 4, T-10-S, R-23-E, SLM

11. County or Parish, State: Uintah County, Utah

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Designation of Operator	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Phoenix Hydrocarbons Operating Corp. has acquired operations from Phoenix Hydrocarbons, Inc. on the above lease, effective as of July 1, 1991. Phoenix Hydrocarbons Operating Corp. is covered by Irrevocable Standby Letter of Credit No. 10005 issued by Texas Commerce Bank - Midland, N. A. in favor of the Utah Division of Oil, Gas & Mining, revised 1/4/91. Phoenix is also covered under Statewide Oil and Gas Bond #B01258, filed and accepted March 23, 1988 by the Chief of the Minerals Adjudication Section, United States Department of the Interior, Bureau of Land Management, Salt Lake City, Utah.

14. I hereby certify that the foregoing is true and correct

Signed _____ Title Landman Date July 9, 1991

(This space for Federal or State office use)

Approved by _____ Title ASSISTANT DISTRICT MANAGER MINERALS Date SEP 22 1992

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

vision of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing:

1-KDR	6-KAS ✓
2-GLH	7-SJ TP
3-JRB	8-FILE
4-CDW ✓	9-
5-KDR ✓	

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☐ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☒ Operator Name Change Only **(MERGER)**

The operator of the well(s) listed below has changed, **effective:** 6-1-99

TO: (new operator) SANTE FE SNYDER CORPORATION
(address) P.O. BOX 129
BAGGS, WYOMING 82321

Phone: (307) 383-2800
Account no. N2000 (6-24-99)

FROM: (old operator) SNYDER OIL CORPORATION
(address) P.O. BOX 129
BAGGS, WYOMING 82321

Phone: (307) 383-2800
Account no. N1305

WELL(S) attach additional page if needed: ***HORSESHOE BEND, LOVE, EAST BENCH & WALKER HOLLOW UNITS**

Name:	*SEE ATTACHED*	API: 43-047-30632	Entity:	S 10	T 23	R 4	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	
Name:		API:	Entity:	S	T	R	Lease:	

OPERATOR CHANGE DOCUMENTATION

DR 1. (r649-8-10) Sundry or other legal documentation has been received from the **FORMER** operator (attach to this form). (Rec'd 6.11.99)

DR 2. (r649-8-10) Sundry or other legal documentation has been received from the **NEW** operator (Attach to this form). (Rec'd 6.11.99)

DR 3. The **Department of Commerce** has been contacted if the new operator above is not currently operating any wells in Utah. Is the company **registered with the state?** (yes/no) ____ If yes, show company file number: #0118879.

DR 4. **FOR INDIAN AND FEDERAL WELLS ONLY.** The BLM has been contacted regarding this change. Make note of BLM status in comments section of this form. BLM approval of **Federal** and **Indian** well operator changes should ordinarily take place prior to the division's approval, and before the completion of **steps 5 through 9** below. (Rec'd 7.6.99)

DR 5. Changes have been entered in the **Oil and Gas Information System** (3270) for each well listed above. (7.12.99)

DR 6. **Cardex** file has been updated for each well listed above.

DR 7. Well **file labels** have been updated for each well listed above. (new system)

DR 8. Changes have been included on the monthly "Operator, Address, and Account Changes" **memo** for distribution to Trust Lands, Sovereign Lands, UGS, Tax Commission, etc. (8.2.99)

DR 9. A folder has been set up for the **Operator Change file**, and a copy of this page has been placed there for reference during routing and processing of the original documents.

OPERATOR CHANGE WORKSHEET (continued) - Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

DR 1. (r649-8-7) **Entity assignments have been reviewed** for all wells listed above. Were entity changes made? (yes/no) ____ If entity assignments were changed, attach copies of Form 6, Entity Action Form.

DR 2. Trust Lands, Sovereign Lands, Tax Commission, etc., have been **notified** through normal procedures of entity changes.

BOND VERIFICATION - (FEE WELLS ONLY)

DR 1. (r649-3-1) The **NEW** operator of any fee lease well listed above has furnished a proper bond. (Rec'd 6.11.99 #JZ7777)

DR 2. A **copy of this form** has been placed in the new and former operator's bond files.

DR 3. The **FORMER** operator has requested a release of liability from their bond (yes/no) ____, as of today's date 6.11.99. If yes, division response was made to this request by letter dated Aug. 12, 1999

LEASE INTEREST OWNER NOTIFICATION OF RESPONSIBILITY

DR 1. Copies of documents have been sent on 8/12/99 to Ed Bonner at Trust Lands for changes involving State leases, in order to remind that agency of their responsibility to review for proper bonding.

JHH 2. (r649-2-10) The former operator of any fee lease wells listed above has been contacted and informed by letter dated _____ 19 __, of their responsibility to notify all interest owners of this change.

FILMING

ICS 1. All attachments to this form have been **microfilmed**. Today's date: 9-29-99.

FILING

__ 1. **Copies** of all attachments to this form have been filed in each **well file**.

__ 2. The **original of this form**, and the **original attachments** are now being filed in the Operator Change file.

COMMENTS

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

Routing:

1-LCR	7-LCR
2-DTS	DTS
3-VLC	✓
4-RJF	✓
5-RWM	✓
6-ADA	✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 7-1-91)

TO (new operator) PHOENIX HYDROCARBONS
(address) OPERATING CORPORATION
PO BOX 2802
MIDLAND, TX 79702
phone (915) 682-1186
account no. N9880

FROM (former operator) PHOENIX HYDROCARBONS, INC.
(address) PO BOX 2802
MIDLAND, TX 79702
RHONDA PATTERSON
phone (915) 682-1186
account no. N0985

Well(s) (attach additional page if needed):

Name: *SEE ATTACHED* API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:
Name: API: Entity: Sec Twp Rng Lease Type:

OPERATOR CHANGE DOCUMENTATION

lec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 7-5-91)

lec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Subsidiary company of Phoenix Hydrocarbons, Inc.)

lec 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) ____ If yes, show company file number: # 151808.

lec 4. (For Indian and Federal Wells ONLY) The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of Federal and Indian well operator changes should take place prior to completion of steps 5 through 9 below.

lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (9-24-92)

lec 6. Cardex file has been updated for each well listed above. (9-24-92)

lec 7. Well file labels have been updated for each well listed above. (9-24-92)

lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (9-24-92)

lec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

– OVER –

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

lec 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ____ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only)

N/A 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.

N/A 2. A copy of this form has been placed in the new and former operators' bond files.

N/A 3. The former operator has requested a release of liability from their bond (yes/no) ___. Today's date _____ 19___. If yes, division response was made by letter dated _____ 19___.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any person with an interest in such lease of the change of operator. Documentation of such notification has been requested.

DTS 9/17/92

N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

RWM 1. All attachments to this form have been microfilmed. Date: Oct 7 1992

FILING

lec 1. Copies of all attachments to this form have been filed in each well file.

lec 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

920924 Bfm/Vernal Approved on 9-22-92 eff. 7-1-91.

FORM 10

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
355 West North Temple, 3 Triad, Suite 350, Salt Lake City, UT 84180-1203

MONTHLY OIL AND GAS PRODUCTION REPORT

OPERATOR NAME AND ADDRESS:

RHONDA PATTERSON
PHOENIX HYDRO OPER CORP
PO BOX 2802
MIDLAND TX 79702

UTAH ACCOUNT NUMBER: N9880

REPORT PERIOD (MONTH/YEAR): 12 / 93

AMENDED REPORT ☐ **(Highlight Changes)**

Well Name / API Number	Entity	Location	Producing Zone	Well Status	Days Oper	Production Volumes OIL(BBL)	GAS(MCF)	WATER(BBL)
FEDERAL #1-5 / 4304730856	10689	10S 23E 5	MVRD			U-33433		
FEDERAL #4-4 / 4304730632	10690	10S 23E 4	MVRD			U-33433		
COTTONWOOD WASH UNIT #1 / 4304731774	10754	12S 21E 10	WSTC			U-40729	Cottonwood Wash Unit (Separate chg)	
EAST BENCH UNIT #1 / 4304731778	10795	11S 22E 33	WSTC			U-25880	East Bench Unit / Bhm Aprv. 2-14-94	
WILLOW CREEK UNIT #1 / 4304731775	10804	11S 20E 27	WSTC			U-34705		
WILLOW CREEK UNIT #2 / 4304731818	10804	11S 20E 5	WSMVD			U-39223		
ALGER PASS #1 / 4304731824	10828	11S 19E 2	MVRD			ML-36213	Alger Pass Unit / Bhm Aprv. 2-14-94	
BASER DRAW 5-1 / 4304731833	10862	07S 22E 5	UNTA			U-075939		
BASER DRAW #6-1 / 4304731834	10863	07S 22E 6	UNTA			U-075939		
BASER 6-2 / 4304731859	10967	07S 22E 6	UNTA			U-075939		
GULF STATE 36-12 / 4304731864	11002	08S 18E 36	GRRV			ML-22057		
GULF STATE #36-22 / 4304731892	11095	08S 18E 36	GRRV			ML-22057		
E. GUSHER 15-1-A / 4304731900	11122	06S 20E 15	GRRV			U-58097		
					TOTALS			

COMMENTS:

I hereby certify that this report is true and complete to the best of my knowledge. Date:

Name and Signature: Telephone Number:

(12/93)

Phoenix Hydrocarbons Operating Corp.

December 20, 1993

State of Utah
Division of Oil, Gas, & Mining
3 Triad Center, #350
Salt Lake City, UT 84180-1203

FEB 28 1994

Attention: Lisha Cordova

RE: Change Of Operator
Sundry Notices

Dear Lisha:

Effective January 1, 1994, Phoenix Hydrocarbons Operating Corp. will transfer all operations in Utah to Snyder Oil Corporation.

Snyder Oil Corporation is covered by Utah State Bond #582488 and Federal Bond #579354 (Guld Insurance Company).

Attached you will find a list of all wells to be Operated by Snyder Oil Corporation. Please note: all of Phoenix Hydrocarbon Operating Corp.'s well should be transfered.

If you should have any questions, please call.

Sincerely,

Rhonda Patterson

Rhonda Patterson

encl.

Post-it™ Fax Note 7671	Date	# of pages ▶ 3
To Lisha	From Carolyn Brockman	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

UINTAH COUNTY

Well Name	LEASE NUMBER	API NUMBER	LOCATION
Gulf State 36-11	ML-22057	43-047-31350	SEC 36, T-6-S, R-18-E
Gulf State 36-12	ML-22057	43-047-31864	SEC 36, T-6-S, R-18-E
Gulf State 36-13	ML-22057	43-047-31345	SEC 36, T-6-S, R-18-E
Gulf State 36-22	ML-22057	43-047-31892	SEC 36, T-6-S, R-18-E
Pariette Draw 28-44	FEE	43-047-31408	SEC 28, T-4-S, R-2-W
Federal Miller #1	UTU0136484	43-047-30034	SEC 4, T-7-S, R-22-E
Wolf Govt # 1	UTU076939	43-047-15609	SEC 5, T-7-S, R-22-E
McLish #1 (Walker-Hollow)	SL-066341	43-047-20280	SEC 8, T-7-S, R-23-E
McLish #2 (Walker-Hollow)	SL-066341	43-047-30011	SEC 8, T-7-S, R-23-E
McLish #3 (Walker-Hollow)	SL-066341	43-047-30027	SEC 8, T-7-S, R-23-E
McLish #4 (Walker-Hollow)	SL-066341	43-047-30030	SEC 8, T-7-S, R-23-E
Walker Hollow U-6	SL-066341	43-047-31034	SEC 8, T-7-S, R-23-E
Pan American #2	SL-066341	43-047-30038	SEC 9, T-7-S, R-23-E
Walker Hollow U-9	SL-066341	43-047-31092	SEC 8, T-7-S, R-23-E
Baser 5-1	UTU076939	43-047-31833	SEC 5, T-7-S, R-22-E
Baser 6-1	UTU076939	43-047-31834	SEC 6, T-7-S, R-22-E
Baser 6-2	UTU076939	43-047-31859	SEC 6, T-7-S, R-22-E
Southman 1-5	UTU33433	43-047-30656	SEC 5, T-10-S, R-23-E
Southman 4-4	UTU33433	43-047-30632	SEC 4, T-10-S, R-23-E
Southman 4-5	UTU33433	43-047-30633	SEC 5, T-10-S, R-23-E
East Gusher 16-1-A	UTU68097	43-047-31900	SEC 16, T-6-S, R-20-E
Coors 14-1-D	UTU65223	43-047-31304	SEC 14, T-7-S, R-21-E
East Gusher 2-1-A	ML-21181	43-047-31431	SEC 2, T-6-S, R-20-E
Madeline 4-3-C	UTU42469	43-047-32279	SEC 4, T-7-S, R-21-E
Federal 6-5-H	UTU68999	43-047-31903	SEC 6, T-7-S, R-21-E
Federal 11-1-M	UTU64376	43-047-32333	SEC 11, T-6-S, R-20-E
Flat Mesa 1-7	U-38420	43-047-30362	SEC 7, T-10-S, R-23-E
Flat Mesa 2-7	U-38420	43-047-30546	SEC 7, T-10-S, R-23-E
Crooked Canyon 1-17	U-37356	43-047-30369	SEC 17, T-10-S, R-23-E
Willow Creek 2	U-39223	43-047-31816	SEC 6, T-11-S, R-20-E
No Name Canyon 1-9	U-37355	43-047-30378	SEC 9, T-10-S, R-23-E
No Name Canyon 2-9	U-37355	43-047-31804	SEC 9, T-10-S, R-23-E
Canyon View Fed 1-18	U-38421	43-047-30379	SEC 18, T-10-S, R-23-E
Alger Pass #1	ML-36213	43-047-31824	SEC 2, T-11-S, R-19-E
Sage Hen 1-6	U-38419	43-047-30382	SEC 6, T-10-S, R-23-E
Sagebrush 1-8	U-37355	43-047-30383	SEC 8, T-10-S, R-23-E
Southman Canyon SWD 3	U-38427	43-047-15980	SEC 15, T-10-S, R-23-E
Jack Rabbit 1-11	U-38425	43-047-30429	SEC 11, T-10-S, R-23-E
Cliff Edge 1-15	U-38427	43-047-30462	SEC 15, T-10-S, R-23-E
White River 1-14	U-38427	43-047-30461	SEC 14, T-10-S, R-23-E
Bitter Creek Fed 1-3	U-29797	43-047-30524	SEC 3, T-11-S, R-22-E
Lookout Point 1-16	ML-22186-A	43-047-30544	SEC 16, T-10-S, R-23-E
Pete's Flat Fed 1-1	U-40736	43-047-30558	SEC 1, T-10-S, R-23-E
Sheepherder Fed 1-10	U-38261	43-047-30559	SEC 10, T-10-S, R-23-E
NSO Fed 1-12	U-38422	43-047-30560	SEC 12, T-10-S, R-23-E
Cottonwood Wash #1	U-40729	43-047-31774	SEC 10, T-12-S, R-21-E
Willow Creek #1	U-34705	43-047-31776	SEC 27, T-11-S, R-20-E
East Bench #1	U-25880	43-047-31778	SEC 33, T-11-S, R-22-E
Lizzard Creek 1-10	U-25880	43-047-31476	SEC 10, T-11-S, R-22-E
Archy Bench #1-2	ML-22348-A	43-047-31469	SEC 2, T-11-S, R-22-E
Coors 2-10-HB	UTU-65222	43-047-32009	SEC 10, T-7-S, R-21-E
E Gusher #3	SL-065841-A	43-047-15590	SEC 3, T-6-S, R-20-E
Natural 1-7	U-6345	43-047-30148	SEC 7, T-11-S, R-21-E
Bonanza Federal 3-15	U-38428	43-047-31278	SEC 15, T-10-S, R-23-E
Lafkas 1-3	CR201	43-047-31178	SEC 3, T-11-S, R-20-E
State 14-16	ML-40904	43-047-31417	SEC 16, T-7-S, R-21-E
Love Unit 1-18	891018090A	43-047-30706	SEC 18, T-11-S, R-22-E
Love Unit 1-11	891018090A	43-047-30617	SEC 11, T-11-S, R-21-E
Love Unit 1-12	891018090A	43-047-30538	SEC 12, T-11-S, R-21-E
Love Unit 4-1	891018090A	43-047-30640	SEC 4, T-11-S, R-21-E
Love Unit B-1-10	891018090A	43-047-30709	SEC 10, T-11-S, R-21-E
Love Unit B-2-3	891018090A	43-047-30766	SEC 3, T-11-S, R-21-E
Horseshoe Bend #2 (ARs)	U-0142175	43-047-15800	SEC 3, T-7-S, R-21-E

DUCHESNE COUNTY

Well Name	LEASE NUMBER	API NUMBER	LOCATION
Pleasant Valley 24-32	FEE	43-013-30888	SEC 24, T-4-S, R-2-W
Castle Peak 1-3	U-47172	43-013-30639	SEC 3, T-9-S, R-16-E
Monument Butte 1-3	U-44004	43-013-30642	SEC 3, T-9-S, R-17-E
Monument Butte 2-3	U-61252	43-013-30810	SEC 3, T-9-S, R-17-E

SNYDER OIL CORPORATION
1625 Broadway, Suite 2200
Denver, Colorado 80202
Phone 303-592-8579

January 13, 1994

State of Utah
Division of Oil, Gas, & Mining
3 Triad Center, #350
Salt Lake City, UT 84180-1203

Attention: Lisha Cordova

RE: Change of Operator
Sundry Notices

Dear Ms. Cordova:

Effective January 1, 1994, Phoenix Hydrocarbons Operating Corp. will transfer all operations in Utah to Snyder Oil Corporation.

Snyder Oil Corporation is covered by Utah State Bond #582488 and Federal Bond #579354 (Guld Insurance Company).

Attached you will find a list of all wells to be operated by Snyder Oil Corporation. Please note: all of Phoenix Hydrocarbon Operating Corp.'s wells should be transferred.

If you should have any questions, please call.

Sincerely,

Steven G. Van Hook
Attorney-in-Fact

Enclosures

INTEROFFICE COMMUNICATION
SNYDER OIL CORPORATION

TO: George Rooney

FROM: Steve Van Hook

DATE: January 17, 1994

RE: **Phoenix Acquisition**
Transfer of Operator Forms

Accompanying this memo are the following items related to the Phoenix acquisition which require your further handling:

Cbld need copies

1. Original letter dated 12/20/93 from Phoenix to the State of Utah Oil, Gas & Mining Division, with exhibit listing all wells in which SOCO becomes operator. Please mail ASAP with our enclosed cover letter advising SOCO is assuming operations.

2. Separate executed forms to transfer operations on the Southman Canyon SWD #3 well. Please complete the contact portion of these forms and forward for approval with the State of Utah.

3. For the Walker Hollow Unit, enclosed is a 1/14/94 cover letter from Phoenix Hydrocarbon with a Sundry Notice executed by SOCO and Phoenix for the following unit wells:

   McLish #1, 2, 3, 4
   Pan Am #2
   Walker Hollow U6, J8

4. For operated wells on Federal lands, a separate file for the following wells is enclosed containing in each three original Sundry Notices of the BLM executed by SOCO and Phoenix. Please file with the BLM in triplicate for the following wells:

Castle Peak 1-3	No Name 2-9, 1-9
Canyon View 1-18	Willow Creek #2
Crooked Canyon 1-17	Flat Mesa 2-7
Federal 11-1-M	Flat Mesa 1-7
Madelive 4-3-C	Gusher 15-1-A
Coors 1-14-D	Southman Canyon 4-5, 4-4, 1-5
Baser 5-1	Baser Draw 6-2, 6-1

Wolf Govt. Federal #1	Federal Miller 1
Monument Butte 2-3	Sage Brush 1-8
Pete's Flat Federal 1-1	Bitter Creek Federal 1-3
Willow Creek #1	White River 1-14
Cliff Edge Fed 1-15	Southman Canyon SWD #3
E. Gusher No. 3	Federal 2-10 HB
Lizzard Creek 1-10	Horseshoe Bend 2
Federal 3-15	Natural 1-7 (Love Unit)
Monument Butte 1-3	

Please advise should any questions arise.

SVH/lk

Attachments

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Vernal District Office
170 South 500 East
Vernal, Utah 84078-2799

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
3162.3
UT08438

FEB 28 1994

February 17, 1994

Snyder Oil Corporation
Attn: Mr. Steven C. Van Hook
1625 Broadway, Suite #2200
Denver, CO 80202

Re: Well: Southman Canyon 4-4
NWSE, Sec. 4, T10S, R23E
Lease U - 33433
Uintah County, Utah

Dear Mr. Van Hook:

This correspondence is in regard to the self-certification statement submitted requesting a change in operator for the referenced well. After a review by this office, the change in operator request is approved. Effective immediately, Snyder Oil Corporation is responsible for all operations performed on the referenced well. All liability will now fall under your bond, BLM Bond No. WY2272, for all operations conducted on the referenced well on the leased land.

If you have any other questions concerning this matter, please contact Ed Forsman of this office at (801)789-1362.

Sincerely,

Howard B. Cleavinger II
Assistant District Manager for Minerals

cc: Alta Country Partner
Alta Midland Partner
EP Operating Ltd. Partner
Hydrocarbon Energy
Xeta Partners 1988

Form 3160-5
(December 1989)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: U-ITU 33433

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Southman Canyon 4-4

2. Name of Operator: Snyder Oil Corporation

9. API Well No.: 43-047-30632

3. Address and Telephone No.: 1625 Broadway, #2200, Denver, CO 80202 (303)592-8500

10. Field and Pool, or Exploratory Area:

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): Sec 4, T-10-S, R-23-E

11. County or Parish, State: Uintah, UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Change Of Operator	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Effective January 1, 1994, Snyder Oil Corporation will become the operator of the referenced well from Phoenix Hydrocarbons Operating Corp.

Snyder Oil Corporation is covered under Federal Bond #579354 (Gulf Insurance Company) and Utah State Bond #582488.

FEB 2 2 1994

14. I hereby certify that the foregoing is true and correct

Signed [signature] Title Attorney-in-Fact Date 1-14-94

(This space for Federal or State office use)

Approved by |s| HOWARD B. CLEAVINGER II Title ASSISTANT DISTRICT MANAGER Date FEB 17 1994

Conditions of approval, if any:

*See Instruction on Reverse Side — Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements

Form 3160-5
(December 1989)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: UTU 33433

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.: Southman Canyon 4-4

2. Name of Operator: Phoenix Hydrocarbons Operating Corp.

9. API Well No.: 43-047-30632

3. Address and Telephone No.: 415 West Wall, #703 Midland, TX 79701 915-682-1186

10. Field and Pool, or Exploratory Area:

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec. 4, T-10-S, R-23-E

11. County or Parish, State: Uintah Co., UT

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Change of Operator	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Effective January 1, 1994, Snyder Oil Corporation will become the Operator of the above referenced well.

FEB 2 2 1994

14. I hereby certify that the foregoing is true and correct

Signed _____ Title President Date 1/14/94

(This space for Federal or State office use)

Approved by |S| HOWARD B. CLEAVINGER II Title ASSISTANT DISTRICT MANAGER MINERALS Date FEB 17 1994

Conditions of approval, if any:

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

Division of Oil, Gas and Mining
OPERATOR CHANGE WORKSHEET

Routing:

1-	LEC/GREF ✓
2-	DTS/SJ ✓
3-	VLC 8-FILE
4-	RJF ✓
5-	DTC
6-	PL ✓

Attach all documentation received by the division regarding this change.
Initial each listed item when completed. Write N/A if item is not applicable.

☒ Change of Operator (well sold) ☐ Designation of Agent
☐ Designation of Operator ☐ Operator Name Change Only

The operator of the well(s) listed below has changed (EFFECTIVE DATE: 1-01-94)

TO (new operator)	SNYDER OIL CORPORATION
(address)	PO BOX 129
	BAGGS WY 82321
	KATHY STAMAN
	phone (307) 383-2800
	account no. N 1305

FROM (former operator)	PHOENIX HYDRO OPER CORP
(address)	PO BOX 2802
	MIDLAND TX 79702
	RHONDA PATTERSON
	phone (915) 682-1186
	account no. N 9880

Well(s) (attach additional page if needed):

Name: **SEE ATTACHED**	API: 043-30632	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:
Name:	API:	Entity:	Sec	Twp	Rng	Lease Type:

OPERATOR CHANGE DOCUMENTATION

Lec 1. (Rule R615-8-10) Sundry or other legal documentation has been received from former operator (Attach to this form). (Rec'd 2-28-94)

Lec 2. (Rule R615-8-10) Sundry or other legal documentation has been received from new operator (Attach to this form). (Rec'd 2-7-94)

N/A 3. The Department of Commerce has been contacted if the new operator above is not currently operating any wells in Utah. Is company registered with the state? (yes/no) _____ If yes, show company file number: _____.

Lec 4. **(For Indian and Federal Wells ONLY)** The BLM has been contacted regarding this change (attach Telephone Documentation Form to this report). Make note of BLM status in comments section of this form. Management review of **Federal and Indian** well operator changes should take place prior to completion of steps 5 through 9 below.

Lec 5. Changes have been entered in the Oil and Gas Information System (Wang/IBM) for each well listed above. (2-28-94)

Lec 6. Cardex file has been updated for each well listed above. (2-28-94)

Lec 7. Well file labels have been updated for each well listed above. (3-2-94)

Lec 8. Changes have been included on the monthly "Operator, Address, and Account Changes" memo for distribution to State Lands and the Tax Commission. (2-28-94)

Lec 9. A folder has been set up for the Operator Change file, and a copy of this page has been placed there for reference during routing and processing of the original documents.

- OVER -

ERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.

ENTITY REVIEW

Lec 1. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) ___ (If entity assignments were changed, attach copies of Form 6, Entity Action Form).

N/A 2. State Lands and the Tax Commission have been notified through normal procedures of entity changes.

BOND VERIFICATION (Fee wells only) (In progress / Phoenix's IDLOC #m416415/80,000 not to be released until replaced)
* Both operators aware

Lec 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished a proper bond.

__ 2. A copy of this form has been placed in the new and former operators' bond files. * Upon compl. of routing.

Lec 3. The former operator has requested a release of liability from their bond (yes/no) ___. Today's date February 28, 1994. If yes, division response was made by letter dated _____ 19___.

LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY

N/A 1. (Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated _____ 19___, of their responsibility to notify any
DTC person with an interest in such lease of the change of operator. Documentation of such
3/10/94 notification has been requested.

N/A 2. Copies of documents have been sent to State Lands for changes involving State leases.

FILMING

✓ 1. All attachments to this form have been microfilmed. Date: March 18 1994.

FILING

✓ 1. Copies of all attachments to this form have been filed in each well file.

✓ 2. The original of this form and the original attachments have been filed in the Operator Change file.

COMMENTS

940228 Partial change only. (see separate change)

IE71/34-35

DOGM Form 5
May 5, 1987

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

RECEIVED
MAR - 2 1995
DIV OF OIL, GAS & MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug bacjk to a different reservoir. Use "APPLICATION FOR PERMIT--" for such proposals.)

1. OIL WELL [ ] GAS WELL [X] OTHER

2. NAME OF OPERATOR: Snyder Oil Corporation

3. ADDRESS OF OPERATOR: 1625 Broadway, Suite 2200, Denver, CO 80202 (303) 592-8500

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: Southman Canyon field

5. LEASE DESIGNATION AND SERIAL NO.

6. IF INDIAN, ALLOTTEE OR TRIBAL NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME: Federal #4-4

9. WELL NO.: 43-047-30632

10. FIELD AND POOL, OR WILDCAT: Southman Canyon

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

14. API NUMBER	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
		Uintah	UT

16. **Check Appropriate Box To Inidcate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(OTHER)			[ ]
(OTHER)			[X]	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Snyder Oil Corporation respectfully requests the following wells be added to list that disposes produced water in the Southman Canyon #3 disposal well:

1) Bonanza Federal #3-15
2) Lookout Point State #1-16
3) Southman Canyon #1-5
4) Southman Canyon #4-4
5) Southman Canyon #4-5
6) Southman Canyon #31-1-L
7) Southman Canyon #9-4-J
8) Southman Canyon #9-3-M

18. I hereby certify that the foregoing is true and correct

SIGNED George Rooney George B. Rooney TITLE Sr. Petroleum Engineer DATE February 15, 1995

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

* See Instructions On Reverse Side

SOCO
Snyder Oil Corporation
P.O. Box 695
Vernal, Utah 84078
801/789-0323

February 29, 1996

Utah State Division of Oil Gas & Mining
3 Triad Center, Suite #350
355 W. North Temple
Salt Lake City, UT 84180-1203

MAR - 1 1996

RE: Site Security Diagrams

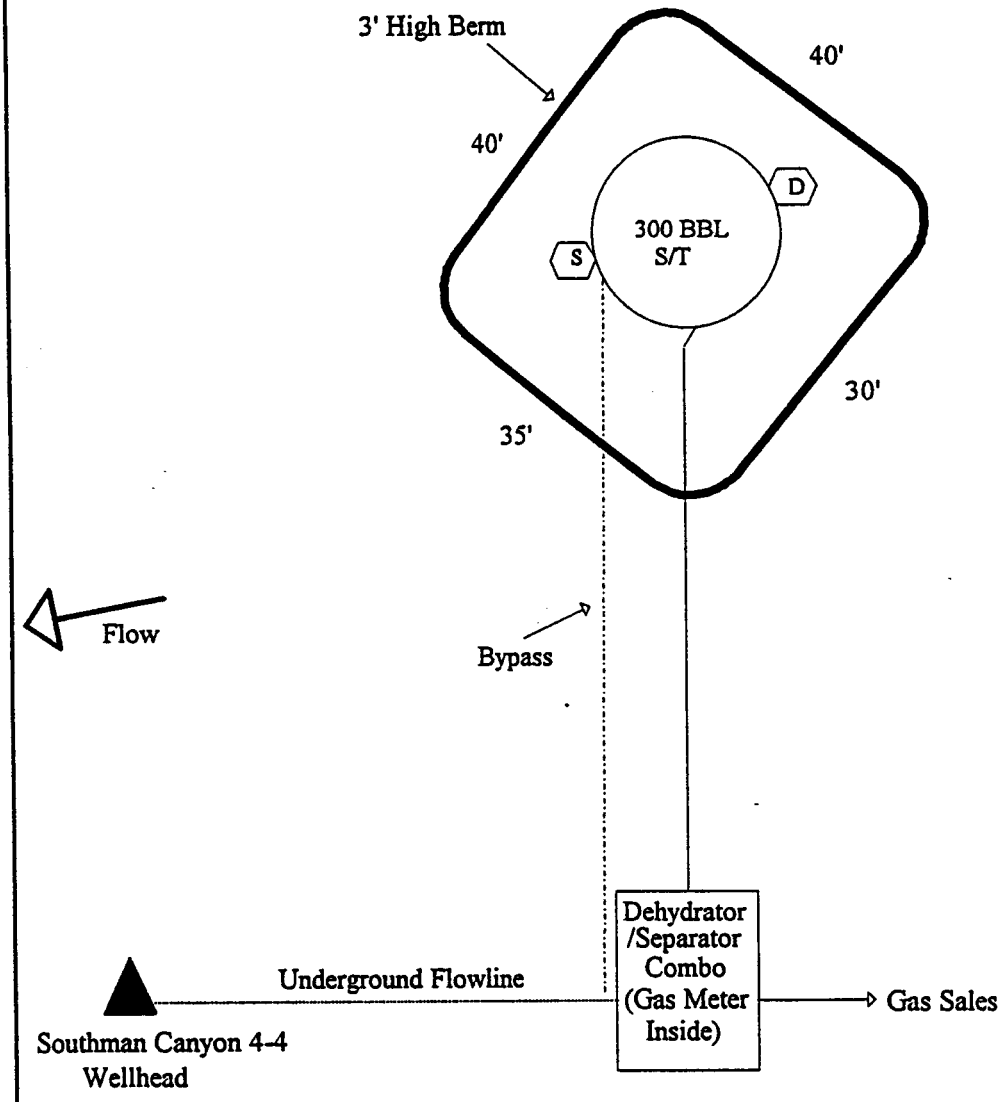
Gentlemen:

Enclosed are copies of Site Security Diagrams for wells operated by Snyder Oil Corporation. We will send you copies of the rest of the diagrams when we receive them from Buys and Associates. If you have any questions, please contact me at 801-789-0323.

Sincerely,

Lucy Nemec

Lucy Nemec
Senior Clerk



SITE SECURITY PLAN LOCATED AT:

SNYDER OIL CORPORATION
P.O. BOX 695
VERNAL, UT 84078

Snyder Oil Corporation
SOUTHMAN CANYON 4-4 NWSE SEC 4 T10S R23E UINTAH COUNTY, UT Lease # U-33433 Prepared By: TM 01/16/05
BUYS & ASSOCIATES, INC. Environmental Consultants

SNYDER OIL CORPORATION

VALVING DETAIL

(Site Security Diagram Attachment)

Position of Valves and Use of Seals for Tanks in Production Phase

Valve	Line Purpose	Position	Seal Installed
E	Overflow/Equalizer	Closed	Yes
F	Fill	Open	No
W	Water	Closed	Yes
D	Drain	Closed	Yes
S	Sales	Closed	Yes

Position of Valves and Use of Seals for the Tank in Sales Phase

Valve	Line Purpose	Position	Seal Installed
E	Overflow/Equalizer	Closed	Yes
F	Fill	Closed	Yes
W	Water	Closed	Yes
D	Drain	Closed	Yes
S	Sales	Closed*	Yes

*The sales line will be opened by the purchaser at the time of sale. Until that time the sales line will remain closed and sealed.

FORM 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.
UTU-33433

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

1. Type of Well
[ ] Oil Well [X] Gas Well [ ] Other

8. Well Name and No.
Federal 2-4

9. API Well No.
43-047-30632

2. Name of Operator
SNYDER OIL CORPORATION

10. Field and Pool, or Exploratory Area

3. Address and Telephone No.
P. O. Box 695, Vernal, UT 84078 801/789-0323

11. County or Parish, State
UINTAH COUNTY

4. Location of Well (Footage, Sec., T., R., m., or Survey Description)
1613' FSL 1329' FEL NW/SE
Section 4, T10S, R23E

RECEIVED
MAR 29 1996
DIV. OF OIL, GAS & MINING

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
[X] Notice of Intent	[ ] Abandonment	[X] Change of Plans
[ ] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[ ] Other _____	[ ] Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Snyder Oil Corporation requests approval to change from a quarterly calibration schedule to a biannual calibration schedule for the above referenced well. This well makes less than 100 MCF/day.

14. I hereby certify that the foregoing is true and correct

Signed Lucy Nemec Title **Senior Clerk** Date **26-Mar-96**

Lucy Nemec

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

***See Instruction on Reverse Side**

Santa Fe Energy Resources, Inc.

June 7, 1999

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: $80,000 Surety Blanket P & A Bond #JZ7777

Dear Sir or Madam:

Enclosed is the above bond for Santa Fe Snyder Corporation. This corporation was formed when Snyder Oil Corporation was merged into Santa Fe Energy Resources, Inc. on May 5, 1999. Copies of the approved merger, issued by the Delaware Secretary of State, are enclosed for your files.

Thank you for your assistance in this matter.

Very truly yours,

Phillip W. Bode

Enclosure

1616 South Voss, Suite 1000
Houston, Texas 77057
713/507-5000

SNYDER
Snyder Oil Corporation
Southern Region

1200 Smith, Suite 3300
Houston, Texas 77002
713-646-6600

June 7, 1999

State of Utah
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: $80,000 Surety Blanket P & A Bond #5736975

Dear Sir or Madam:

Santa Fe Snyder Corporation was formed when Snyder Oil Corporation was merged into Santa Fe Energy Resources, Inc. on May 5, 1999. Copies of the approved merger, issued by the Delaware Secretary of State, are enclosed for your files.

As this merger causes "Snyder" to cease to exist and their activities are covered by bond #JZ7777, please release bond # 5736975 and return it to the sender.

Thank you for your assistance in this matter.

Very truly yours,

Phillip W. Bode

Enclosure

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

In Reply Refer To:
3106
U-19037 et al
(UT-932)

JUL 1 1999

NOTICE

Santa Fe Snyder Corporation
840 Gessner, Suite 1400
Houston, TX 77024

: Oil and Gas

Merger Recognized
Name Change Recognized

Acceptable evidence has been filed in this office concerning the merger of Snyder Oil Corporation into Santa Fe Energy Resources, Inc. and the name being subsequently changed to Santa Fe Snyder Corporation as the surviving entity.

For our purposes the merger and name change are recognized effective June 1, 1999, per company request.

The oil and gas lease files identified on the enclosed exhibits have been noted as to the merger and name change. The exhibits were compiled from lists supplied by Santa Fe Snyder Corporation. We have not adjudicated the case files to determine if the entities affected by the merger and name change hold an interest in the leases identified, nor have we attempted to identify leases where the entities are the operator on the ground, maintaining no vested record title or operating rights interest. We are notifying the Minerals Management Service and all applicable BLM offices of the merger and name change by a copy of this notice. If additional documentation for a change of operator are required by our Field Offices, you will be contacted by them.

By recognition of the merger and the name change the principal on bonds held by Snyder and Santa Fe are automatically changed to Santa Fe Snyder Corporation. Riders to Nationwide Bond No. 400JF 5493 (BLM Bond No. UT0855) and Nationwide Bond No. 5473615 (BLM Bond No. WY2912) have been filed in the Utah State Office. It is the request of Santa Fe Snyder Corporation to change the name on BLM Bond No. UT0855 to reflect the merger/name change, and to terminate the period of liability on BLM Bond No. WY2912. A decision regarding this matter will follow in due course.

Christopher J. Merritt

Christopher J. Merritt
Acting Group Leader,
Minerals Adjudication Group

Enclosures
1. Santa Fe Energy Resources, Inc. Exhibit of Leases
2. Snyder Oil Corporation Exhibit of Leases

cc: All State Offices
Moab Field Office
Vernal Field Office
MMS–Reference Data Branch, MS 3130, P.O. Box 5860, Denver, CO 80217
State of Utah, DOGM, Attn: Kristen Risbeck (Ste. 1210) Box 145801, SLC, UT 84114-5801
St. Paul Fire & Marine Insurance Co., 385 Washington St., St. Paul, MN 55102
SAFECO Insurance Company of America, SAFECO Plaza, Seattle, WA 98185
Santa Fe Snyder Corp., Attn: Phyllis Sobotik, 1625 Broadway, #2200, Denver, CO 80202
Irene Anderson (UT-932)
Teresa Thompson (UT-931)

SANTA FE LEASES

LESSOR	STATE
BLM NMNM-92488	NM
BLM NMNM-45235	NM
BLM NMNM-24877	NM
BLM NMNM-93398	NM
BLM NMNM-96591	NM
BLM NMNM-77894	NM
BLM NMNM-65900	NM
BLM NMNM-87977	NM
BLM NMNM-65864	NM
BLM NMNM-95879	NM
BLM NMNM-97394	NM
BLM NMNM-98005	NM
BLM NMNM-98006	NM
BLM NMNM-98010	NM
BLM NMNM-95418	NM
BLM NMNM-25667	NM
BLM NMNM-98300	NM
BLM NMNM-98033	NM
BLM NMNM-998271	NM
BLM NMNM-98305	NM
BLM NMNM-91179	NM
BLM NMNM-85420	NM
BLM NMNM-100956	NM
BLM NMNM-58393	NM
BLM OKNM 23555	OK
BLM NM 15074 (OKLA)	OK
BLM UTU-19037	UT
BLM UTU-55626	UT
BLM UTU-38354	UT
BLM UTU-38401	UT
BLM UTU-38430	UT
BLM UTU-42823	UT
BLM WYEV-026201	WY
BLM WYW-35860	WY
BLM WYW-47198	WY
BLM WYEV-022765	WY
BLM WYEV-023941	WY
BLM WYEV-026196	WY
BLM WYEV-026201	WY
BLM WYEV-026202	WY
BLM WYEV-026204	WY
BLM WYEV-026205	WY
BLM WYEV-026208	WY
BLM WYEV-026209	WY
BLM WYW-04674	WY
BLM WYW-023207	WY
BLM WYW-023211	WY
BLM WYW-0268735	WY
BLM WYCHEY-037066	WY
BLM WYW-58075	WY
BLM WYW-17284	WY
BLM WYW-17296	WY
BLM WYW-17282(A)	WY
BLM WYW-55067	WY

LESSOR	STATE
BLM WYW-59145	WY
BLM WYW-43661	WY
BLM WYW-0311938	WY
BLM WYW-52562	WY
BLM WYW EV-022932	WY
BLM WYW-27645	WY
BLM WYW-043930-A	WY
BLM WYW EV-026056	WY
BLM WYW-0322610	WY
BLM WYW-0320213	WY
BLM EV-023313-A	WY
BLM WYW-9578	WY
BLM WYW-96918	WY
BLM WYW-0320078	WY
BLM WYW-035599	WY
BLM WYW-2120	WY
BLM WYEV-024469	WY
BLM WYW-0136175	WY
BLM WYW-0136177	WY
BLM WYW-05991	WY
BLM WYW-02736	WY
BLM WYW EV-025548	WY
BLM EV-023313-E	WY
BLM EV-023313-B	WY
BLM WYW-21124	WY
BLM WYW EV-022931	WY
BLM WYW-61240	WY
BLM WYW-18480	WY
BLM WYW-51654	WY
BLM WYW-50676	WY
BLM COC-036289 A&B	WY
BLM WYW-0942	WY
BLM WYW-63210	WY
BLM WYW-66866	WY
BLM WYW-102793	WY
BLM WYW-107726	WY
BLM W-70335	WY
BLM W-70496	WY
BLM W-70326	WY
BLM W-55746	WY
BLM W-56480	WY

SNYDER LEASES

LESSOR	STATE	LESSOR	STATE
USA COC-33237	CO	USA U-0136484	UT
USA COC-36719	CO	USA U-37573	UT
USA LAES 49122	LA	USA U-33433	UT
USA LAES 49123	LA	USA U-47172	UT
USA LAES 49124	LA	USA U-37355	UT
USA LAES 49125	LA	USA UTU-15855	UT
USA LAES 49127	LA	USA U-0142175	UT
USA LAES 49128	LA	USA UTU-02651	UT
USA LAES 49129	LA	USA UTU-02651-B	UT
USA LAES 49130	LA	USA U-34705	UT
USA LAES 49131	LA	USA U-40729	UT
USA LAES 49132	LA	USA U-58097	UT
USA LAES 49133	LA	USA U-30289	UT
USA LAES 49134	LA	USA UTU-72632	UT
USA LAES 49135	LA	USA UTU-73013	UT
USA LAES 49136	LA	USA UTU-64376	UT
USA LAES 49137	LA	USA UTU-38261	UT
USA LAES 49138	LA	USA UTU-28212	UT
USA LAES 49139	LA	USA UTU-28213	UT
USA LAES 49140	LA	USA UTU-38419	UT
USA LAES 49141	LA	USA U-53861	UT
USA LAES 49142	LA	USA UTU-38418	UT
USA LAES 49143	LA	USA UTU-66401	UT
USA LAES 49144	LA	USA U-38423	UT
USA LAES 49145	LA	USA UTU-38425	UT
USA LAES 49146	LA	USA U-38421	UT
USA LAES 49147	LA	USA UTU-38428	UT
USA LAES 49148	LA	USA U-38420	UT
USA LAES 49149	LA	USA UTU-34350	UT
USA LAES 49150	LA	USA UTU-39223	UT
USA LAES 49151	LA	USA U-64923	UT
USA LAES 49152	LA	USA UTU-40736	UT
USA LAES 49153	LA	USA U-075939	UT
USA LAES 49154	LA	USA U-70235	UT
USA LAES 49155	LA	USA UTU-44426	UT
USA LAES 49156	LA	USA UTU-57495	UT
USA LAES 49157	LA	USA UTU-57503	UT
USA LAES 49158	LA	USA UTU-52106	UT
USA LAES 49159	LA	USA UTU-59121	UT
USA LAES 49160	LA	USA UTU-73009	UT
USA LAES 49161	LA	USA UTU-73010	UT
USA LAES 49162	LA	USA UTU-50490	UT
USA LAES 49163	LA	USA UTU-65126	UT
USA LAES 49164	LA	USA UTU-49228	UT
USA LAES 49165	LA	USA UTU-53127	UT
USA LAES 49166	LA	USA UTU-65132	UT
USA LAES 49167	LA	USA UTU-63951	UT
USA LAES 49168	LA	USA UTU-47483	UT
USA LAES 49169	LA	USA UTU-63978	UT
USA LAES 49170	LA	USA UTU-69116	UT
USA LAES 49171	LA	USA UTU-65138	UT

SNYDER LEASES

LESSOR	STATE	LESSOR	STATE
USA LAES 49172	LA	USA UTU-54774	UT
USA LAES 49173	LA	USA UTU-71230	UT
USA LAES 49174	LA	USA UTU-71234	UT
USA LAES 49175	LA	USA UTU-44799	UT
USA LAES 49176	LA	USA UTU-57512	UT
USA LAES 49177	LA	USA UTU-53084	UT
USA LAES 49178	LA	USA UTU-53938	UT
USA LAES 49179	LA	USA UTU-61936	UT
USA LAES 49180	LA	USA UTU-47127	UT
USA LAES 49181	LA	USA UTU-53918	UT
USA LAES 49183	LA	USA UTU-47484	UT
USA LAES 49194	LA	USA UTU-53946	UT
USA LAES 49198	LA	USA UTU-53941	UT
USA LAES 49199	LA	USA UTU-42531	UT
USA LAES 49200	LA	USA U-49245	UT
USA LAES 49201	LA	USA U-50802	UT
USA MTM-38582-A	MT	USA UTU-0647	UT
USA MTM-63708	MT	USA UTU-50687	UT
USA M-13323 (ND)	ND	USA UTU-37116	UT
USA M-68863 (SD)	SD	USA UTU-59122	UT
USA UTU-70189	UT	USA UTU-63985	UT
USA UTU-73175	UT	USA UTU-52298	UT
USA UTU-73434	UT	USA UTU-7386	UT
USA UTU-73435	UT	USA UTU-67178	UT
USA UTU-73444	UT	USA UTU-67549	UT
USA UTU-73450	UT	USA UTU-74416	UT
USA U-8345	UT	USA UTU-74413	UT
USA U-14646	UT	USA UTU-73900	UT
USA U-66746	UT	USA UTU-67868	UT
USA UTU-42469	UT	USA UTU-74414	UT
USA U-65222	UT	USA UTU-49530	UT
USA U-61263	UT	USA UTU-53860	UT
USA UTU-29535	UT	USA UTU-34711	UT
USA U-25880	UT	USA UTU-46699	UT
USA U-65223	UT	USA UTU-73643	UT
USA U-29797	UT	USA UTU-0141804	UT
USA UTU-0109054	UT	USA UTU-75091	UT
USA UTU-8346	UT	USA UTU-75097	UT
USA U-8347	UT	USA UTU-74972	UT
USA UTU-8344	UT	USA UTU-75096	UT
USA U-8344-A	UT	USA UTU-74415	UT
USA UTU-8348	UT	USA UTU-38401	UT
USA U-38424	UT	USA UTU-38411	UT
USA U-38427	UT	USA UTU-31260	UT
USA SL-065841-A	UT	USA UTU-59654	UT
USA UTU-31736	UT	USA U-14219	UT
USA U-38426	UT	USA UTU-30123	UT
USA U-44090-A	UT	USA UTU-34714	UT
USA U-71694	UT	USA UTU-10134	UT
USA U-72028	UT	USA UTU-10830	UT
USA U-51026	UT	USA UTU-14223	UT

Santa Fe Snyder Corporation

July 2, 1999

Utah Division of Oil, Gas & Mining
1594 W. North Temple, Suite 1210
P. O. Box 145801
Salt Lake City, Utah 84114-5801

Attn.: Ms. Kristen Risbeck

RE: Company Merger
Surety Bond Number - JZ 7777
Operator Number – N2000

Dear Ms. Risbeck:

Snyder Oil Corporation (SOCO) and Santa Fe Energy Resources, Inc. (Santa Fe) have merged to form Santa Fe Snyder Corporation (SFS). The legal acceptance date of the merger is May 5, 1999. However in an effort to simplify documentation issues, SFS requests that June 1, 1999 be used as the effective date of merger.

Please change all operated facilities, Applications to Drill (approved and in process) and any other regulatory filings from Snyder Oil Corporation to Santa Fe Snyder Corporation. Attached is the following information in support of this request.

Copy of Merger Certificate
Copy of the Office of the Secretary of State's Acceptance
Sundry Notices for Properties Located on Fee or State Land
Sundry Notice for Federal Properties
Spreadsheet of all Utah Facilities Operated by SOCO

All correspondence, documents, notifications, etc. should continue to be sent to SFS at the following address

1625 Broadway, Suite 2200
Denver, CO 80202

Please inform SFS when this request has been accepted and the changes are finalized. If any questions arise or additional information is required, please contact me at 303-592-8668.

Sincerely,

Phyllis Sobotik
Sr. Regulatory Specialist

/ps
Enclosures:

1625 Broadway
Suite 2200
Denver, Colorado 80202
303/592-8500
Fax 303/592-8600

State of Delaware

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"SNYDER OIL CORPORATION", A DELAWARE CORPORATION,

WITH AND INTO "SANTA FE ENERGY RESOURCES, INC." UNDER THE NAME OF "SANTA FE SNYDER CORPORATION", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE FIFTH DAY OF MAY, A.D. 1999, AT 11 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

Edward J. Freel, Secretary of State

0774411 8100M

991177495

AUTHENTICATION: 9725623

DATE: 05-05-99

CERTIFICATE OF MERGER

Merger of Snyder Oil Corporation, a Delaware corporation
With and Into
Santa Fe Energy Resources, Inc., a Delaware corporation

Pursuant to the provisions of Section 251 of the Delaware General Corporation Law, the undersigned certifies as follows concerning the merger (the "Merger") of Snyder Oil Corporation, a Delaware corporation, with and into Santa Fe Energy Resources, Inc., a Delaware corporation, with Santa Fe Energy Resources, Inc. as the surviving corporation (the "Surviving Corporation").

1. The Agreement and Plan of Merger, dated as of January 13, 1999 (the Agreement and Plan of Merger being hereinafter referred to as the "Merger Agreement") has been approved, adopted, certified, executed and acknowledged by Snyder Oil Corporation and Santa Fe Energy Resources, Inc. in accordance with Section 251 of the Delaware General Corporation Law.

2. The Merger contemplated in the Merger Agreement and this Certificate of Merger will be effective immediately upon the filing of this Certificate of Merger

3. The name of the Surviving Corporation shall be Santa Fe Energy Resources, Inc. which shall be changed herewith to Santa Fe Snyder Corporation.

4. Article FIRST of the Restated Certificate of Incorporation of Santa Fe Energy Resources, Inc. is amended, effective as of the date hereof, to read in its entirety as follows:

"FIRST: The name of the corporation (hereinafter referred to as the "Corporation") is Santa Fe Snyder Corporation."

and that the first paragraph of Article FOURTH of the Restated Certificate of Incorporation of Santa Fe Energy Resources, Inc. is amended, effective as of the date hereof, to read in its entirety as follows:

"FOURTH: The total number of shares of all classes of capital stock which the Corporation shall have authority to issue is 350,000,000, of which 50,000,000 shares shall be Preferred Stock, par value $.01 per share, and 300,000,000 shares shall be Common Stock, par value $.01 per share."

The Restated Certificate of Incorporation of Santa Fe Energy Resources, Inc., as amended, in effect at the effective time of the Merger shall be the certificate of incorporation of the

Surviving Corporation.

5. The executed Merger Agreement is on file at the principal place of business of the Surviving Corporation, 1616 South Voss Road, Houston, Texas 77057.

6. A copy of the Merger Agreement will be furnished by the Surviving Corporation, on request and without cost, to any stockholder of Snyder Oil Corporation or Santa Fe Energy Resources, Inc.

Dated this 5th day of May, 1999.

SANTA FE ENERGY RESOURCES, INC.

By: David L Hicks

Name: David L. Hicks
Title: Vice President — Law and General Counsel

FORM 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: **See Attached List**

6. If Indian, Allottee or Tribe Name: **See Attached List**

7. If Unit or CA, Agreement Designation:

1. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other — See Attached List

8. Well Name and No.: **See Attached List**

9. API Well No.: **See Attached List**

2. Name of Operator: **Santa Fe Snyder Corporation** — **Attn.: Phyllis Sobotik**

10. Field and Pool, or Exploratory Area: **See Attached List**

3. Address and Telephone No.: **1625 Broadway, Suite 2200, Denver, CO 80202** — **303-592-8668**

11. County or Parish, State: **See Attached List**

4. Location of Well (Footage, Sec., T., R., m., or Survey Description): **See Attached List**

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other Change of Operator	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Snyder Oil Corporation and Santa Fe Energy Resources, Inc. have merged to form Santa Fe Snyder Corporation. The legal acceptance date of the merger is May 5, 1999. However in an effort to simplify documentation issues, Santa Fe Snyder Corporation requests that June 1, 1999 be used as the effective date of merger.
A copy of the Merger Certificate and of the Office of the Secretary of State's Acceptance is attached.

Nationwide BLM Bond Number - UT-0855

Surety Bond Number - 400JF 5433

RECEIVED
JUL - 9 1999
DIV. OF OIL, GAS & MINING

Please contact Phyllis Sobotik at 303-592-8668 if you have any questions.

14. I hereby certify that the foregoing is true and correct
Signed Phyllis Sobotik Title **Sr. Regulatory Specialist** Date **01-Jul-99**

(This space for Federal or State office use)
Approved by _____ Title _____ Date _____
Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

***See Instruction on Reverse Side**

UTAH FACILITIES

Lease	Unit Name	Tribe Name	Field	Stat	County	1/41/4	S	T	R	Lease Number	Mineral Type	API Number	Comments
Horseshoe Bend #4-10			Horseshoe Bend	INA	Uintah	NW/SE	4	7S	22E	U 0136484	FED	43-047-32577	11728
Horseshoe Bend #36-1P			Horseshoe Bend	ACT	Uintah	SE/SE	36	6S	21E	ML 33225	STATE	43-047-31482	9815
Horseshoe Bend Compressor Site			Horseshoe Bend	ACT	Uintah		4	7S	21E				
Jack Rabbit #1-11			Natural Buttes	INA	Uintah	SW/NE	11	10S	23E	U 38425	FED	43-047-30423	1475
L.C.K. #30-1H			Horseshoe Bend	ACT	Uintah	SE/NE	30	6S	21E	N/A	FEE	43-047-31588	10202
Lafkas Federal #1-3			Hill Creek	INA	Uintah	SW/SW	3	11S	20E	U 34350	FED	43-047-31178	1367
Lizzard Creek #1-10			Bitter Creek	ACT	Uintah	NW/NW	10	11S	22E	U 25880	FED	43-047-31475	9870
Lookout Point #1-16			Natural Buttes	ACT	Uintah	NE/SE	16	10S	23E	ML 22186 A	STATE	43-047-30544	1495
Love Unit #1-11	Love		Love	ACT	Uintah	C/SW	11	11S	21E	U 008344 A	FED	43-047-30617	1366
Love Unit #1-12	Love		Love	ACT	Uintah	SW/NW	12	11S	21E	U 008344 A	FED	43-047-30638	1366
Love Unit #4-1	Love		Love	INA	Uintah	NW/SW	4	11S	21E	U 8347	FED	43-047-30640	1366
Love Unit #A1-18	Love		Love	ACT	Uintah	SW/SE	18	11S	21E	U 8348	FED	43-047-30706	1366
Love Unit #B1-10	Love		Love	ACT	Uintah	SE/SW	10	11S	21E	U 8347	FED	43-047-30709	1366
Love Unit #B2-3	Love		Love	INA	Uintah	SW/SW	3	11S	21E	U 8347	FED	43-047-30766	1366
Love Unit Compressor Site			Love	ACT	Uintah			11S	21E				
Madeline #4-3C			Horseshoe Bend	ACT	Uintah	Lot 3	4	7S	21E	U 42469	FED	43-047-32279	11379
McLish #1	Walker Hollow		Walker Hollow (Horseshoe Bend)	ACT	Uintah	SW/SW	8	7S	23E	U 02651	FED	43-047-20280	2760
McLish #2	Walker Hollow		Walker Hollow (Horseshoe Bend)	INA	Uintah	SW/SE	8	7S	23E	U 02651	FED	43-047-30011	2760
McLish #3			Walker Hollow (Horseshoe Bend)	ACT	Uintah	NE/SE	8	7S	23E	U 02651	FED	43-047-30027	12504
McLish #4	Walker Hollow		Walker Hollow (Horseshoe Bend)	INA	Uintah	NE/SW	8	7S	23E	U 02651	FED	43-047-30030	2760
Natural #1-7			Love (Horseshoe Bend)	INA	Uintah	NW/NE	7	11S	21E	U 8345	FED	43-047-30148	6129
No Name Canyon #1-9			Natural Buttes	ACT	Uintah	SE/NE	9	10S	23E	U 37355	FED	43-047-30378	1466
No Name Canyon #2-9			Natural Buttes	ACT	Uintah	NE/NW	8	10S	23E	U 37355	FED	43-047-31504	1468
NSO Federal #1-12			Natural Buttes	ACT	Uintah	NE/NW	12	10S	23E	U 38423	FED	43-047-30560	1480
Pan American #1	Walker Hollow		Walker Hollow (Horseshoe Bend)	INA	Uintah	SW/NW	9	7S	23E	U 02651 A	FED	43-047-30037	
Pan American #2	Walker Hollow		Walker Hollow (Horseshoe Bend)	INA	Uintah	NW/SW	9	7S	23E	U 02651 A	FED	43-047-30038	2760
Pariette Draw #28-44			Windy Ridge West (Eight Mile Flat N.)	ACT	Uintah	SE/SE	28	4S	1E	N/A	FEE	43-047-31408	4960
Pete's Flat #1-1			Natural Buttes	INA	Uintah	NE/SE	1	10S	23E	U 38423	FED	43-047-30558	1510
Sage Hen #1-6			Natural Buttes	INA	Uintah	NE/SE	6	10S	23E	U 38419	FED	43-047-30382	1490
Sagebrush #1-8			Natural Buttes	TAD	Uintah	SW/NE	8	10S	23E	U 37355	FED	43-047-30383	1467
Sheepherder #1-10			Natural Buttes	ACT	Uintah	NE/SE	10	10S	23E	U 38424	FED	43-047-30559	1470
Southman Canyon #1-5 (Federal #1-5)			Natural Buttes	ACT	Uintah	SE/NW	5	10S	23E	U 33433	FED	43-047-30856	10689
Southman Canyon #3			Natural Buttes	WDW	Uintah	NE/SE	15	10S	23E	U 66406	FED	43-047-15880	Saltwater Disposal 99990
Southman Canyon #4-4 (Federal #4-4)			Natural Buttes	INA	Uintah	NW/SE	4	10S	23E	U 33433	FED	43-047-30632	10690
Southman Canyon #4-5			Natural Buttes	ACT	Uintah	NE/SE	5	10S	23E	U 33433	FED	43-047-30633	10131
Southman Canyon #9-3M			Natural Buttes	ACT	Uintah	SW/SW	9	10S	23E	U 37355	FED	43-047-32540	11767
Southman Canyon #9-4J			Natural Buttes	ACT	Uintah	NW/SE	9	10S	23E	U 37355	FED	43-047-32541	11685
Southman Canyon #31-1L			Natural Buttes	ACT	Uintah	SW/	31	9S	23E	U 33433	FED	43-047-32543	11678
State #14-16			Brennan Bottom	ACT	Uintah	SW/SW	16	7S	21E	ML 40904	STATE	43-047-31417	8010

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER

8. WELL NAME and NUMBER: Exhibit "A"

2. NAME OF OPERATOR: El Paso Production Oil & Gas Company

9. API NUMBER:

3. ADDRESS OF OPERATOR: 8 South 1200 East CITY Vernal STATE Utah ZIP 84078

PHONE NUMBER: 435-789-4433

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start:	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☒ OTHER: Name Change
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

As a result of the merger between The Coastal Corporation and a wholly owned subsidary of El Paso Energy Corporation, the name of Coastal Oil & Gas Corporation has been changed to El Paso Production Oil & Gas Company effective March 9, 2001.

See Exhibit "A"

Bond # 400JU0708

Coastal Oil & Gas Corporation

NAME (PLEASE PRINT) John T. Elzner TITLE Vice President

SIGNATURE DATE 06-15-01

El Paso Production Oil & Gas Company

NAME (PLEASE PRINT) John T. Elzner TITLE Vice President

SIGNATURE DATE 06-15-01

(This space for State use only)

RECEIVED

JUN 19 2001

DIVISION OF
OIL, GAS AND MINING

(5/2000) (See Instructions on Reverse Side)

State of Delaware

Office of the Secretary of State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "COASTAL OIL & GAS CORPORATION", CHANGING ITS NAME FROM "COASTAL OIL & GAS CORPORATION" TO "EL PASO PRODUCTION OIL & GAS COMPANY", FILED IN THIS OFFICE ON THE NINTH DAY OF MARCH, A.D. 2001, AT 11 O'CLOCK A.M.

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

0610204 8100

010162788

AUTHENTICATION: 1061007

DATE: 04-03-01

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

COASTAL OIL & GAS CORPORATION (the "Company"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of the Company, by the unanimous written consent of its members, filed with the minutes of the Board, adopted a resolution proposing and declaring advisable the following amendment to the Certificate of Incorporation of the Company:

RESOLVED that it is deemed advisable that the Certificate of Incorporation of this Company be amended, and that said Certificate of Incorporation be so amended, by changing the Article thereof numbered "FIRST." so that, as amended, said Article shall be and read as follows:

"FIRST. The name of the corporation is El Paso Production Oil & Gas Company."

SECOND: That in lieu of a meeting and vote of stockholders, the stockholders entitled to vote have given unanimous written consent to said amendment in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said COASTAL OIL & GAS CORPORATION has caused this certificate to be signed on its behalf by a Vice President and attested by an Assistant Secretary, this 9th day of March 2001.

COASTAL OIL & GAS CORPORATION

David L. Siddall
Vice President

Attest:

Margaret E. Roark, Assistant Secretary

RECEIVED

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 11:00 AM 03/09/2001
010118394 - 0610204

JUN 19 2001

DIVISION OF
OIL, GAS AND MINING

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

In Reply Refer To:
3106
UTSL-065841
(UT-924)

JUL 10 2001

NOTICE

El Paso Production Oil & Gas Company	:	Oil and Gas
Nine Greenway Plaza	:	
Houston TX 77046-0095	:	

Name Change Recognized

Acceptable evidence has been received in this office concerning the name change of Coastal Oil & Gas Corporation into El Paso Production Oil & Gas Company with El Paso Production Oil & Gas Company being the surviving entity.

For our purposes, the name change is recognized effective March 9, 2001.

The oil and gas lease files identified on the enclosed exhibit have been noted as to the name change. The exhibit was compiled from a list of leases obtained from our computer program. We have not abstracted the lease files to determine if the entities affected by this name change hold an interest in the leases identified nor have we attempted to identify leases where the entitities are the operator on the ground maintaining no vested recorded title or operating rights interests. We will be notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

If you identify additional leases in which the entities maintain an interest, please contact this office and we will appropriately document those files with a copy of this Notice.

Due to the name change, the name of the principal/obligor on the bond is required to be changed from Coastal Oil & Gas Corporation to El Paso Production Oil & Gas Company. You may accomplish this either by consent of surety rider on the original bond or a rider to the original bond. The bonds are held in Wyoming and Colorado.

Opolonia L. Abeyta

Opolonia L. Abeyta
Acting Chief, Branch of
Minerals Adjudication

Enclosure
1. Exhibit of Leases (1 pp)

cc: Moab Field Office
Vernal Field Office
MMS, Reference Data Branch, MS3130, PO Box 5860, Denver CO 80217
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC UT 84114
Teresa Thompson (UT-922)
Joe Incardine (UT-921)

Exhibit of Leases

UTUSL-065841A
UTU-28652
UTU-37943
UTU-44089
UTU-44090A
UTU-61263
UTU-00343
UTU-02651
UTU-02651B
UTU-0142175
UTU-70235
UTU-70406
UTU-74954
UTU-75132
UTU-75699
UTU-76242
UTU-78032
UTU-4377
UTU-4378
UTU-7386
UTU-8344A
UTU-8345
UTU-8347
UTU-8621
UTU-14646
UTU-15855
UTU-25880
UTU-28213
UTU-29535
UTU-29797
UTU-31736
UTU-34350
UTU-34705
UTU-37116
UTU-37355
UTU-37573
UTU-38261
UTU-39223
UTU-40729
UTU-40736
UTU-42469
UTU-47172
UTU-50687
UTU-52298
UTU-0109054
UTU-0143511
UTU-0143512
UTU-38401
UTU-38411
UTU-38418
UTU-38419
UTU-38420
UTU-38421
UTU-38423
UTU-38424
UTU-38425
UTU-38426
UTU-38427
UTU-38428
UTU-53861
UTU-58097
UTU-64376
UTU-65222
UTU-65223
UTU-66746
UTU-67178
UTU-67549
UTU-72028
UTU-72632
UTU-73009
UTU-73010
UTU-73013
UTU-73175
UTU-73434
UTU-73435
UTU-73444
UTU-73450
UTU-73900
UTU-74409
UTU-74410
UTU-74413
UTU-74414
UTU-74415
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UTU-75096
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UTU-75673
UTU-76259
UTU-76260
UTU-76261
UTU-76493
UTU-76495
UTU-76503
UTU-78228
UTU-78714
UTU-78727
UTU-78734
UTU-79012
UTU-79011
UTU-71694
UTU-00576
UTU-00647
UTU-01470D
UTU-0136484
UTU-8344
UTU-8346
UTU-8648
UTU-28212
UTU-30289
UTU-31260
UTU-33433
UTU-34711
UTU-46699
UTU-78852
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UTU-075939
UTU-0149767
UTU-2078
UTU-44426
UTU-49530
UTU-51026
UTU-53860
UTU-66401
UTU-67868
UTU-65389
UTU-77084
UTU-61430
UTU-72633
UTU-72650
UTU-49692
UTU-57894
UTU-76829
UTU-76830
UTU-76831

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING		
1. GLH		4-KAS
2. CDW ✓		5-LP ✓
3. JLT		6-FILE

Enter date after each listed item is completed

Change of Operator (Well Sold) — Designation of Agent

Operator Name Change (Only) — **X** **Merger**

The operator of the well(s) listed below has changed, effective: **3-09-2001**

FROM: (Old Operator):
COASTAL OIL & GAS CORPORATION
Address: 9 GREENWAY PLAZA STE 2721
HOUSTON, TX 77046-0995
Phone: 1-(713)-418-4635
Account N0230

TO: (New Operator):
EL PASO PRODUCTION OIL & GAS COMPANY
Address: 9 GREENWAY PLAZA STE 2721 RM 2975B
HOUSTON, TX 77046-0995
Phone: 1-(832)-676-4721
Account N1845

CA No. **Unit:**

WELL(S)

NAME	API NO	ENTITY NO	SEC TWN RNG	LEASE TYPE	WELL TYPE	WELL STATUS
PETES FLAT 1-1	43-047-30558	1510	01-10S-23E	FEDERAL	GW	S
FEDERAL 4-4	43-047-30632	10690	04-10S-23E	FEDERAL	GW	P
SOUTHMAN CANYON 4-5	43-047-30633	6131	05-10S-23E	FEDERAL	GW	P
FEDERAL 1-5 (CA 74473)	43-047-30856	10689	05-10S-23E	FEDERAL	GW	P
SAGE HEN 1-6 (CA CR-3)	43-047-30382	1490	06-10S-23E	FEDERAL	GW	P
FLAT MESA 1-7	43-047-30365	1505	07-10S-23E	FEDERAL	GW	P
FLAT MESA 2-7	43-047-30545	1506	07-10S-23E	FEDERAL	GW	P
SAGE BRUSH 1-8	43-047-30383	1467	08-10S-23E	FEDERAL	GW	TA
NO NAME CANYON 1-9	43-047-30378	1466	09-10S-23E	FEDERAL	GW	P
NO NAME CANYON 2-9	43-047-31504	1468	09-10S-23E	FEDERAL	GW	P
SOUTHMAN CANYON 9-3M	43-047-32540	11767	09-10S-23E	FEDERAL	GW	P
SOUTHMAN CANYON 9-4-J	43-047-32541	11685	09-10S-23E	FEDERAL	GW	P
SHEEPHERDER 1-10 (CA CR-5)	43-047-30559	1470	10-10S-23E	FEDERAL	GW	P
JACK RABBIT 1-11 (CA CR-23)	43-047-30423	1475	11-10S-23E	FEDERAL	GW	S
NSO FEDERAL 1-12 (CA CR-22)	43-047-30560	1480	12-10S-23E	FEDERAL	GW	P
WHITE RIVER 1-14	43-047-30481	1500	14-10S-23E	FEDERAL	GW	P
CLIFF EDGE 1-15	43-047-30462	1524	15-10S-23E	FEDERAL	GW	TA
BONANZA FEDERAL 3-15	43-047-31278	8406	15-10S-23E	FEDERAL	GW	P
CROOKED CANYON 1-17	43-047-30369	1465	17-10S-23E	FEDERAL	GW	S
CANYON VIEW FEDERAL 1-18	43-047-30379	1485	17-10S-23E	FEDERAL	GW	P

OPERATOR CHANGES DOCUMENTATION

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 06/19/2001
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 06/19/2001
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 06/21/2001
4. Is the new operator registered in the State of Utah: YES Business Number: 608186-0143

5. If **NO**, the operator was contacted contacted on: N/A

6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: 07/10/2001

7. **Federal and Indian Units:** The BLM or BIA has approved the successor of unit operator for wells listed on: 07/10/2001

8. **Federal and Indian Communization Agreements ("CA"):** The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: 07/10/2001

9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 08/23/2001

2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 08/23/2001

3. Bond information entered in RBDMS on: N/A

4. Fee wells attached to bond in RBDMS on: N/A

STATE BOND VERIFICATION:

1. State well(s) covered by Bond No.: N/A

FEDERAL BOND VERIFICATION:

1. Federal well(s) covered by Bond No.: WY 2793

FEE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond No: N/A

2. The **FORMER** operator has requested a release of liability from their bond on: N/A
   The Division sent response by letter on: N/A

3. (R649-2-10) The **FORMER** operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: _____

FILMING:

1. All attachments to this form have been **MICROFILMED** on: _____

FILING:

1. **ORIGINALS/COPIES** of all attachments pertaining to each individual well have been filled in each well file on: _____

COMMENTS: Master list of all wells involved in operator change from Coastal Oil & Gas Corporation to El Paso Production Oil and Gas Company shall be retained in the "Operator Change File".

WESTPORT OIL AND GAS COMPANY, L.P.

410 Seventeenth Street #2300 Denver Colorado 80202-4436
Telephone: 303 573 5404 Fax: 303 573 5609

February 1, 2002

Department of the Interior
Bureau of Land Management
2850 Youngfield Street
Lakewood, CO 80215-7093
Attention: Ms. Martha Maxwell

RE: BLM Bond CO-1203
BLM Nationwide Bond 158626364
Surety – Continental Casualty Company
Belco Energy Corporation merger into Westport Oil and Gas Company, Inc.
Conversion of Westport Oil and Gas Company, Inc., into Westport Oil and Gas Company, L.P.
Assumption Rider – Westport Oil and Gas Company, L.P.

Dear Ms. Maxwell:

Pursuant to our recent conversations, please find the following list of enclosures for the BLM's consideration and approval:

Two (2) Assumption Riders, fully executed originals.
Copies of Belco Energy Corporation merger into Westport Oil and Gas Company, Inc.
Copies of Westport Oil and Gas Company, Inc., conversion into Westport Oil and Gas Company, L.P.
List of all Federal/BIA/State Leases - Belco/Westport's leases – in all states.

Please inform us of any additional information needed to complete the change to Westport Oil and Gas Company, L.P., as operator of record.

I thank you for your assistance and cooperation in this matter. Please do not hesitate contacting the undersigned, should a question arise.

Sincerely,
Westport Oil and Gas Company, L.P.

Debby J. Black

Debby J. Black
Engineer Technician

Encl:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155

In Reply Refer To:
3106
UTU-25566 et al
(UT-924)

FEB 2 1 2002

NOTICE

Westport Oil and Gas Company L.P. : Oil and Gas
410 Seventeenth Street, #2300 :
Denver Colorado 80215-7093 :

Name Change Recognized

Acceptable evidence has been received in this office concerning the name change of Westport Oil and Gas Company, Inc. into Westport Oil and Gas Company, L.P. with Westport Oil and Gas Company, L.P. being the surviving entity.

For our purposes, the name change is recognized effective December 31, 2001.

The oil and gas lease files identified have been noted as to the name change. The exhibit was compiled from a list of leases obtained from our computer program. We have not abstracted the lease files to determine if the entities affected by this name change hold an interest in the leases identified nor have we attempted to identify leases where the entities are the operator on the ground maintaining no vested recorded title or operating rights interests. We will be notifying the Minerals Management Service and all applicable Bureau of Land Management offices of the change by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

If you identify additional leases in which the entities maintain an interest, please contact this office and we will appropriately document those files with a copy of this Notice.

Due to the name change, the name of the principal/obligor on the bond is required to be changed from Westport Oil and Gas Company, Inc. to Westport Oil and Gas Company, L.P.. You may accomplish this either by consent of surety rider on the original bond or a rider to the original bond. The bonds are held in Colorado.

UTU-03405
UTU-20895
UTU-25566
UTU-43156
UTU-49518
UTU-49519
UTU-49522
UTU-49523

Robert Lopez
Chief, Branch of
Minerals Adjudication

cc: Moab Field Office
Vernal Field Office
MMS, Reference Data Branch, MS3130, PO Box 5860, Denver CO 80217
State of Utah, DOGM, Attn: Jim Thompson (Ste. 1210), Box 145801, SLC UT 84114
Teresa Thompson (UT-922)
Joe Incardine (UT-921)

UNITED STATES GOVERNMENT

memorandum

Branch of Real Estate Services
Uintah & Ouray Agency

Date: 5 December, 2002

Reply to Attn of: Supervisory Petroleum Engineer

Subject: Modification of Utah Division of Oil, Gas and Mining Regulations

To: Director, Utah Division of Oil, Gas and Mining Division: John Baza

We have been advised of changes occurring with the operation of your database for Change of Operator. You will be modifying your records to reflect Change of Operator once you have received all necessary documentation from the companies involved, and perhaps in advance of our Notice of Concurrence/Approval of Change of Operator where Indian leases are involved.

We have no objection.

With further comment to Rulemaking, I wish to comment concerning the provision of Exhibits for upcoming Hearings. I would like to see the Uintah & Ouray Agency, BIA, and the Ute Indian Tribe, Energy & Mineral Resources Department added to the list of those parties that receive advance Exhibits so as to allow us to have research time prior to Hearing dates. We will be able to provide a more informed recommendation to the Oil, Gas and Mining Board. It would be best if we would receive only those Exhibits that concern Indian lands, specifically on or adjacent to Indian lands. This may be a difficult situation to attain, as it is not always clear where 'on or adjacent' occurs.

I am aware that you have gone to extra effort to correct this matter already, and I fully appreciate it. My request is intended only to allow the addition of Uintah & Ouray Agency and Ute Indian Tribe to the official listing.

We appreciate you concern, and hope that these comments are timely enough for consideration in the revision process.

Charles H Cameron

CC: Minerals & Mining Section of RES
Ute Energy & Mineral Resources Department: Executive Director
chrono

United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Washington, D.C. 20240

FEB 1 0 2003

IN REPLY REFER TO:
Real Estate Services

Carroll A. Wilson
Principal Landman
Westport Oil and Gas Company, L.P.
1368 South 1200 East
Vernal, Utah 84078

Dear Mr. Wilson:

This is in response to your request for approval of RLI Insurance Company's Nationwide Oil and Gas Lease Bond No. RLB0005239 executed effective December 17, 2002, ($150,000 coverage) with Westport Oil and Gas Company, L. P., as principal.

This bond is hereby approved as of the date of this correspondence and will be retained in the Bureau of Indian Affairs' Division of Real Estate Services, 1849 C Street, NW, MS-4512-MIB, Washington, D.C. 20240. All Bureau oil and gas regional offices and the surety are being informed of this action.

In cases where you have existing individual and/or collective bonds on file with one or more of our regional offices, you may now request those offices, directly, to terminate in lieu of coverage under this Nationwide Bond.

Enclosed is a copy of the approved bond for your files. If we may be of further assistance in this matter, please advise.

Sincerely,

Director, Office of Trust Responsibilities

ACTING

Enclosure

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ OTHER _____

8. WELL NAME and NUMBER: Exhibit "A"

2. NAME OF OPERATOR: El Paso Production Oil & Gas Company

9. API NUMBER:

3. ADDRESS OF OPERATOR: 9 Greenway Plaza CITY Houston STATE TX ZIP 77064-0995

PHONE NUMBER: (832) 676-5933

10. FIELD AND POOL, OR WILDCAT:

4. LOCATION OF WELL

FOOTAGES AT SURFACE:

COUNTY:

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: _____	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☑ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
_____	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☐ OTHER: _____
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Operator change to Westport Oil and Gas Company, L.P., 1670 Broadway, Suite 2800, Denver, CO. 80202-4800, effective December 17, 2002.

BOND # _____

State Surety Bond No. RLB0005236
Fee Bond No. RLB0005238

RECEIVED
FEB 2 8 2003
DIV. OF OIL, GAS & MINING

EL PASO PRODUCTION OIL & GAS COMPANY

By: _____
Jon R. Nelsen, Attorney-in-Fact

WESTPORT OIL AND GAS COMPANY, L.P.

NAME (PLEASE PRINT) David R. Dix TITLE Agent and Attorney-in-Fact

SIGNATURE _____ DATE 12/17/02

(This space for State use only)

(5/2000) (See Instructions on Reverse Side)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
SEE ATTACHED EXHIBIT "A"

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SEE ATTACHED EXHIBIT "A"

2. Name of Operator
WESTPORT OIL & GAS COMPANY, L.P.

9. API Well No.
SEE ATTACHED EXHIBIT "A"

3a. Address
P.O. BOX 1148 VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7023

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SEE ATTACHED EXHIBIT "A"

11. County or Parish, State
UINTAH COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other SUCCESSOR OF OPERATOR	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

WESTPORT OIL & GAS COMPANY, L.P., IS CONSIDERED TO BE THE OPERATOR ON THE ATTACHED DESCRIBED LANDS AND IS RESPONSIBLE UNDER THE TERMS AND CONDITIONS OF THE LEASE FOR THE OPERATIONS CONDUCTED ON THE LEASED LANDS OR PORTIONS THEREOF. BOND COVERAGE FOR THIS WELL IS PROVIDED BY FEDERAL NATIONWIDE BOND NO. 158626364, EFFECTIVE FEBRUARY 1, 2002, AND BIA NATIONWIDE BOND NO. RLB0005239, EFFECTIVE FEBRUARY 10, 2003.

RECEIVED
MAR 0 4 2003
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
CHERYL CAMERON
Title
OPERATIONS
Signature
Date
March 4, 2003

THIS SPACE FOR FEDERAL OR STATE USE

Approved by
Title
Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Office

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. GLH
2. CDW ✓
3. FILE

X Change of Operator (Well Sold) Designation of Agent/Operator

Operator Name Change Merger

The operator of the well(s) listed below has changed, effective: **12-17-02**

FROM: (Old Operator):		**TO:** (New Operator):
EL PASO PRODUCTION OIL & GAS COMPANY		WESTPORT OIL & GAS COMPANY LP
Address: 9 GREENWAY PLAZA		Address: P O BOX 1148
HOUSTON, TX 77064-0995		VERNAL, UT 84078
Phone: 1-(832)-676-5933		Phone: 1-(435)-781-7023
Account No. N1845		Account No. N2115

CA No. **Unit:**

WELL(S)

NAME	SEC TWN RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS
UTE TRAIL U 1	08-09S-22E	43-047-15377	2903	FEDERAL	GW	PA
NBU 73	17-09S-22E	43-047-31102	99998	FEDERAL	GW	PA
NBU 61	21-09S-22E	43-047-30900	99998	FEDERAL	GW	PA
STATE 1-32	32-09S-22E	43-047-34317	13419	STATE	GW	P
BITTER CREEK 1	34-09S-22E	43-047-15374	99998	FEDERAL	GW	PA
PETES FLAT 1-1	01-10S-23E	43-047-30558	1510	FEDERAL	GW	S
SOUTHMAN CANYON 4-4 (FED)	04-10S-23E	43-047-30632	10690	FEDERAL	GW	P
BONANZA 4-6	04-10S-23E	43-047-34751	99999	FEDERAL	GW	APD
SOUTHMAN CANYON 4-5	05-10S-23E	43-047-30633	6131	FEDERAL	GW	P
SOUTHMAN CANYON 1-5 (UTU-74473)	05-10S-23E	43-047-30856	10689	FEDERAL	GW	P
SAGE HEN FEDERAL 1-6 (CR-3)	06-10S-23E	43-047-30382	1490	FEDERAL	GW	S
FLAT MESA FEDERAL 1-7	07-10S-23E	43-047-30365	1505	FEDERAL	GW	S
FLAT MESA FEDERAL 2-7	07-10S-23E	43-047-30545	1506	FEDERAL	GW	P
SAGEBRUSH FEDERAL 1-8	08-10S-23E	43-047-30383	1467	FEDERAL	GW	TA
BONANZA 8-2	08-10S-23E	43-047-34087	99999	FEDERAL	GW	APD
BONANZA 8-3	08-10S-23E	43-047-34770	99999	FEDERAL	GW	APD
NO NAME CANYON FEDERAL 1-9	09-10S-23E	43-047-30378	1466	FEDERAL	GW	P
NO NAME CANYON FEDERAL 2-9	09-10S-23E	43-047-31504	1468	FEDERAL	GW	P
SOUTHMAN CANYON 9-3-M	09-10S-23E	43-047-32540	11767	FEDERAL	GW	S
SOUTHMAN CANYON 9-4-J	09-10S-23E	43-047-32541	11685	FEDERAL	GW	P

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 02/28/2003
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 03/04/2003
3. The new company has been checked through the **Department of Commerce, Division of Corporations Database on:** 03/06/2003
4. Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181
5. If **NO**, the operator was contacted contacted on: _____

6. (R649-9-2)Waste Management Plan has been received on: IN PLACE

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM-12/31/2003 BIA-12/5/02

8. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 02/27/2003

9. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: 01/09/2003

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 03/27/2003
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 03/27/2003
3. Bond information entered in RBDMS on: N/A
4. Fee wells attached to bond in RBDMS on: N/A

STATE WELL(S) BOND VERIFICATION:

1. State well(s) covered by Bond Number: RLB 0005236

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: 158626364

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: RLB 0005239

FEE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB 0005238
2. The **FORMER** operator has requested a release of liability from their bond on: N/A
   The Division sent response by letter on: N/A

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: N/A

COMMENTS:

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE WELLS- SEE ATTACHED

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
MULTIPLE WELLS- SEE ATTACHED

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MULTIPLE WELLS- SEE ATTACHED

2. Name of Operator
WESTPORT OIL & GAS COMPANY, L.P.

9. API Well No.
MULTIPLE WELLS- SEE ATTACHED

3a. Address
1368 SOUTH 1200 EAST, VERNAL, UTAH 84078

3b. Phone No. *(include area code)*
435-781-7060

10. Field and Pool, or Exploratory Area
BONANZA/SOUTHMAN CANYON

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
MULTIPLE WELLS- SEE ATTACHED

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other VARIANCE
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

Westport Oil & Gas requests a variance to Onshore Order No. 4, Part III C. a. requiring each sales tank be equipped with a pressure- vacuum thief hatch and/or vent line valve. The variance is requested as an economic analysis shows the value of the shrunk condensate will not payout the incremental cost of purchasing and maintaining the valve resulting in a loss of value over the producing life of the well.

The volume lost to shrinkage by dropping the tank pressure from 6 ozs. To 0 psig is shown to be 0.3% of the tank volume. This was determined by lab analysis of a representative sample from the field. The sample shrunk from 98.82% of original volume to 98.52% when the pressure was dropped. The average well produces approximately 6 bbls condensate per month. The resulting shrinkage would amount to 0.56 bbls per month lost volume due to shrinkage. The value of the shrunk and lost condensate does not recoup or payout the cost of installing and maintaining the valves and other devices that hold the positive tank pressure. An economic run based on the loss and costs is attached. Westport Oil & Gas requests approval of this variance in order to increase the value of the well to the operator and the mineral royalty owners.

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
DEBRA DOMENICI	ENVIRONMENTAL ASSISTANT
Signature: Debra Domenici	Date: July 9, 2004

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	Federal Approval Of This Action Is Necessary

Accepted by the Utah Division of Oil, Gas and Mining
Date: 07/26/04
By: [signature]

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

COPY SENT TO OPERATOR
Date: 7-16-04
Initials: CHD

RECEIVED
JUL 14 2004
DIV. OF OIL, GAS & MINING

ALL WELLS ROCKY MOUNTAIN GAS- BONANZA/SOUTHMAN CANYON ENARDO VARIANCE

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
BONANZA 04-06	4	10S	23E	NESW	U-33433	UTU33433	4304734751005S1
BONANZA 06-02	6	10S	23E	NESW	UTU38419	UTU38419	4304734843005S1
BONANZA 08-02	8	10S	23E	SESE	UTU37355	UTU37355	4304734087005S1
BONANZA 08-03	8	10S	23E	NWNW	U-37355	UTU37355	4304734770005S1
BONANZA 09-05	9	10S	23E	SESW	U-37355	UTU37355	4304734866005S1
BONANZA 09-06	9	10S	23E	NWNE	U-37355	UTU37355	4304734771005S1
BONANZA 10-02	10	10S	23E	NWNW	U72028	UTU80201	4304734704005S1
BONANZA 10-03	10	10S	23E	NWNE	UTU38261	CR-5	4304734728005S1
BONANZA 10-04	10	10S	23E	SENE	UTU40736	CR-5	4304734772005S1
BONANZA 1023-4E	4	10S	23E	SWNW	U-33433		4304735392005S1
BONANZA 1023-6C	6	10S	23E	NENW	U-38419	UTU38419	4304735153005S1
BONANZA 1023-7B	7	10S	23E	NWNE	U-38420	UTU38420	4304735172005S1
BONANZA 1023-7L	7	10S	23E	NWSW	U-38420		4304735289005S1
BONANZA 11-02	11	10S	23E	SWNW	UTU38425	CR-23	4304734773005S1
BONANZA FEDERAL 03-15	15	10S	23E	NENW	UTU38428	UTU38428	4304731278005S1
CANYON VIEW FEDERAL 1-18	18	10S	23E	SENW	UTU38421	UTU38421	4304730379005S1
CROOKED CYN FED 1-17	17	10S	23E	NESW	UTU37355	UTU37355	4304730369005S1
FLAT MESA FEDERAL 1-7	7	10S	23E	NWSE	UTU38420	UTU38420	4304730365005S1
FLAT MESA FEDERAL 2-7	7	10S	23E	SENW	UTU38420	UTU38420	4304730545005S1
JACK RABBIT 1-11	11	10S	23E	SWNE	UTU38425	CR-23	4304730423005S1
LOOKOUT POINT STATE 1-16	16	10S	23E	NESE	ML22186A		4304730544005S1
NO NAME CANYON 1-9	9	10S	23E	SENE	UTU037355	UTU37355	4304730378005S1
NO NAME CANYON 2-9	9	10S	23E	NENW	UTU037355	UTU37355	4304731504005S1
NSO FEDERAL 1-12	12	10S	23E	NENW	UTU38423	CR-22	4304730560005S1
PETE'S FLAT 1-1	1	10S	23E	NESE	UTU40736		4304730558005S1
SAGE HEN FEDERAL 1-6	6	10S	23E	NESE	UTU38419	CR-3	4304730382005S1
SAGEBRUSH FEDERAL 1-8	8	10S	23E	SWNE	UTU37355	UTU37355	4304730383005S1
SHEEPHERDER FEDERAL 1-10	10	10S	23E	NESE	UTU38424	CR-5	4304730559005S1
SOUTHMAN CANYON 01-05 FED	5	10S	23E	SENW	UTU33433	UTU74473	4304730856005S1
SOUTHMAN CANYON 04-04	**4**	**10S**	**23E**	**NWSE**	**UTU33433**	**UTU33433**	**4304730632005S1**
SOUTHMAN CANYON 04-05	5	10S	23E	NESE	UTU33433	UTU33433	4304730633005S1
SOUTHMAN CANYON 09-03M	9	10S	23E	SWSW	UTU37355	UTU37355	4304732540005S1
SOUTHMAN CANYON 09-04J	9	10S	23E	NWSE	UTU37355	UTU37355	4304732541005S1
SOUTHMAN CANYON 31-01-L	31	09S	23E	NWSW	UTU33433	UTU74898	4304732543005S1
SOUTHMAN CANYON 31-02X	31	09S	23E	NWNW	UTU33433	UTU33433	4304734898005S1
SOUTHMAN CANYON 31-03	31	09S	23E	SENW	UTU33433	UTU33433	4304734726005S1
SOUTHMAN CANYON 31-04	31	09S	23E	SESW	UTU33433		4304734727005S1
SOUTHMAN CANYON 923-31B	31	09S	23E	NWNE	U-33433	UTU33433	4304735150005S1
SOUTHMAN CANYON 923-31J	31	09S	23E	NWSE	U-33433	UTU33433	4304735149005S1
SOUTHMAN CANYON 923-31P	31	09S	23E	SESE	U-33433		4304735288005S1
SOUTHMAN CANYON SWD #3	15	10S	23E	NESE	UTU-38427		4304715880005S1
WHITE RIVER 1-14	14	10S	23E	NENW	UTU38427	UTU38427	4304730481005S1

Westport Oil & Gas, LP.

Project Economics Worksheet

Instructions: Fill in blue bordered areas with before and after project data. The evaluation results are shown below and graphed automatically at the bottom of the page. This sheet is protected to prevent accidental alteration of the formulas. See JTC for changes. OPX entered as annual costs and/or as unit OPX costs for $/BF and $/MCF

Project Name: **Condensate Shrinkage Economics**

Is this job a well pull or production rig job ??? N (Y or N)

	BEFORE $/Year	AFTER $/Year	DIFFERENCE $/Year
Gross Oil Revenue	$1,088	$1,099	$11
Gross Gas Revenue	$0	$0	$0
NGL Revenue	$0	$0	$0
PULLING UNIT SERVICE			$0
WIRELINE SERVICE			$0
SUBSURF EQUIP REPAIRS			$0
COMPANY LABOR			$0
CONTRACT LABOR	$0	$200	$200
CONTR SERVICE			$0
LEASE FUEL GAS	$0	$0	$0
UTILITIES - ELECTRICITY	$0	$0	$0
CHEMICAL TREATING			$0
MATERIAL & SUPPLY	$0	$150	$150
WATER & HAULING			$0
ADMINISTRATIVE COSTS			$0
GAS PLANT PROCESSING			$0
Totals	$0	$350	$350 Increased OPX Per Year

Investment Breakdown:

	Cap/Exp Code	Cost, $
Capital $	820/830/840	$1,200
Expense $	830/860	$0
Total $		$1,200

Oil Price	$ 23.00	$/BO
Gas Price	$ 3.10	$/MCF
Electric Cost	$ -	$ / HP / day
OPX/BF	$ 2.00	$/BF
OPX/MCF	$ 0.62	$/MCF

Production & OPX Detail:

	Before		After		Difference	
Oil Production	0.192	BOPD	0.194	BOPD	0.002	BOPD
Gas Production	0	MCFPD	0	MCFPD	0	MCFPD
Wtr Production	0	BWPD	0	BWPD	0	BWPD
Horse Power		HP		HP	0	HP
Fuel Gas Burned		MCFPD		MCFPD	0	MCFPD

Project Life:

Life = 20.0 Years

(Life no longer than 20 years)

Internal Rate of Return:

After Tax IROR = #DIV/0!

AT Cum Cashflow:

Operating Cashflow = ($2,917) (Discounted @ 10%)

Payout Calculation:

$$\text{Payout} = \frac{\text{Total Investment}}{\text{Sum(OPX + Incremental Revenue)}} = 1$$

Payout occurs when total AT cashflow equals investment

See graph below, note years when cashflow reaches zero

Payout = NEVER Years or #VALUE! Days

Gross Reserves:

Oil Reserves = 6 BO

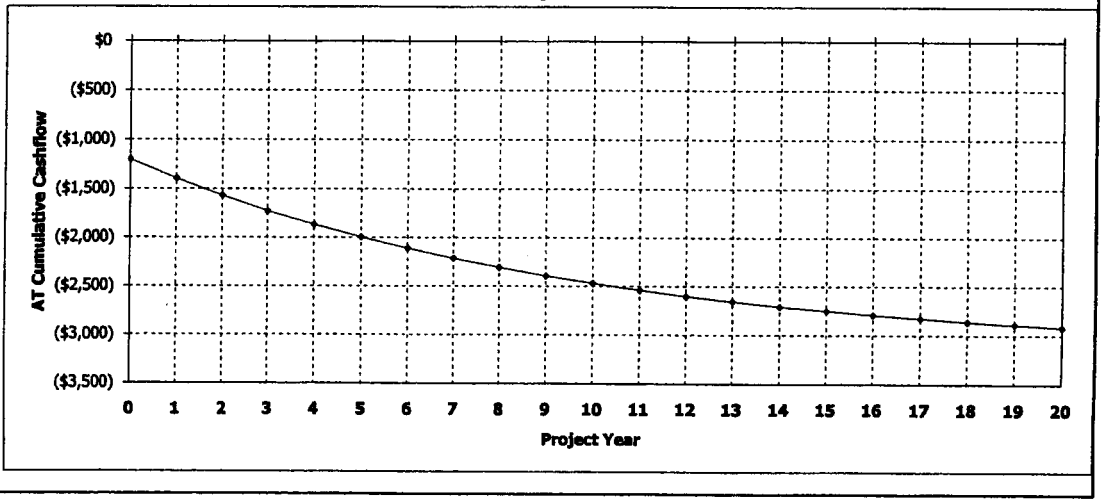
Gas Reserves = 0 MCF

Gas Equiv Reserves = 38 MCFE

Notes/Assumptions:

An average NBU well produces 0.192 Bcpd with no tank pressure. The production is increased to 0.196 Bcpd if 6 ozs of pressure are placed on the tank. The increased production does not payout the valve cost or the estimated annual maintenance costs.

Project: Condensate Shrinkage Economics



Westport Oil and Gas, Inc.

NBU/Ouray Field

RFL 2003-022

COMPARISON OF FLASH BACK PRESSURES

Calculated by Characterized Equation-of-State

Flash Conditions		Gas/Oil Ratio (scf/STbbl)	Specific Gravity of Flashed Gas	Separator Volume Factor	Separator Volume Percent
psig	°F	(A)	(Air=1.000)	(B)	(C)
Calculated at Laboratory Flash Conditions					
80	70			1.019	
0	122	30.4	0.993	1.033	101.37%
0	60	0.0	—	1.000	98.14%
Calculated Flash with Backpressure using Tuned EOS					
80	70			1.015	
6.0 oz	65	24.6	0.777	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
4.0 oz	65	24.7	0.778	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
2.0 oz	65	24.7	0.779	1.003	98.82%
0	60	0.0	—	1.000	98.52%
80	70			1.015	
0	65	24.8	0.780	1.003	98.82%
0	60	0.0	—	1.000	98.52%

(A) Cubic Feet of gas at 14.696 psia and 60 °F per Barrel of Stock Tank Oil at 60 °F.

(B) Barrels of oil at indicated pressure and temperature per Barrel of Stock Tank Oil at 60 °F.

(C) Oil volume at indicated pressure and temperature as a percentage of original saturated oil volume.

Note: Bubblepoint of sample in original sample container was 80 psig at 70° F with 1 cc water

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE WELLS- SEE ATTACHED

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
MULTIPLE WELLS- SEE ATTACHED

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MULTIPLE WELLS- SEE ATTACHED

2. Name of Operator
WESTPORT OIL & GAS COMPANY, L.P.

9. API Well No.
MULTIPLE WELLS- SEE ATTACHED

3a. Address
1368 SOUTH 1200 EAST, VERNAL, UTAH 84078

3b. Phone No. *(include area code)*
435-781-7060

10. Field and Pool, or Exploratory Area
MULTIPLE WELLS- SEE ATTACHED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
MULTIPLE WELLS- SEE ATTACHED

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

WESTPORT OIL & GAS COMPANY RESCINDS ANY PREVIOUSLY APPROVED DISPOSAL SITES AND PROPOSES THAT ANY PRODUCED WATER FROM THE ATTACHED LIST OF WELLS WILL BE CONTAINED IN A WATER TANK AND WILL THEN BE HAULED BY TRUCK TO ONE OF THE FOLLOWING PRE-APPROVED DISPOSAL SITES: DALBO, INC.; RNI, SEC. 5-T9S-R22E; ACE OILFIELD, SEC. 2-T6S-R20E; SOUTHMAN CANYON #3 SWD, SEC. 15-T10S-R23E, API NO. 43047158800000S1; AND DIRTY DEVIL FEDERAL 14-10 SWD, SWC. 10-T9S-R24E, API NO. 430473056600S1.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
DEBRA DOMENICI	ENVIRONMENTAL ASSISTANT
Signature: Debra Domenici	Date: July 12, 2004

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED
JUL 14 2004
DIV. OF OIL, GAS & MINING

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
SOUTHMAN CANYON 04-04	4	10S	23E	NWSE	UTU33433	UTU33433	4304730632005S1
SOUTHMAN CANYON 04-05	5	10S	23E	NESE	UTU33433	UTU33433	4304730633005S1
SOUTHMAN CANYON 09-03M	9	10S	23E	SWSW	UTU37355	UTU37355	4304732540005S1
SOUTHMAN CANYON 09-04J	9	10S	23E	NWSE	UTU37355	UTU37355	4304732541005S1
SOUTHMAN CANYON 31-01-L	31	09S	23E	NWSW	UTU33433	UTU74898	4304732543005S1
SOUTHMAN CANYON 31-02X	31	09S	23E	NWNW	UTU33433	UTU33433	4304734898005S1
SOUTHMAN CANYON 31-03	31	09S	23E	SENW	UTU33433	UTU33433	4304734726005S1
SOUTHMAN CANYON 31-04	31	09S	23E	SESW	UTU33433		4304734727005S1
SOUTHMAN CANYON 923-31B	31	09S	23E	NWNE	U-33433	UTU33433	4304735150005S1
SOUTHMAN CANYON 923-31J	31	09S	23E	NWSE	U-33433	UTU33433	4304735149005S1
SOUTHMAN CANYON 923-31P	31	09S	23E	SESE	U-33433		4304735288005S1
SOUTHMAN CANYON SWD #3	15	10S	23E	NESE	UTU-38427		4304715880005S1
WHITE RIVER 1-14	14	10S	23E	NENW	UTU38427	UTU38427	4304730481005S1

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
BONANZA 04-06	4	10S	23E	NESW	U-33433	UTU33433	4304734751005S1
BONANZA 06-02	6	10S	23E	NESW	UTU38419	UTU38419	4304734843005S1
BONANZA 08-02	8	10S	23E	SESE	UTU37355	UTU37355	4304734087005S1
BONANZA 08-03	8	10S	23E	NWNW	U-37355	UTU37355	4304734770005S1
BONANZA 09-05	9	10S	23E	SESW	U-37355	UTU37355	4304734866005S1
BONANZA 09-06	9	10S	23E	NWNE	U-37355	UTU37355	4304734771005S1
BONANZA 10-02	10	10S	23E	NWNW	U72028	UTU80201	4304734704005S1
BONANZA 10-03	10	10S	23E	NWNE	UTU38261	CR-5	4304734728005S1
BONANZA 10-04	10	10S	23E	SENE	UTU40736	CR-5	4304734772005S1
BONANZA 1023-2A	2	10S	23E	NENE	ML47062		4304735347005S1
BONANZA 1023-2C	2	10S	23E	NENW	ML47062		4304735346005S1
BONANZA 1023-2E	2	10S	23E	SWNW	ML47062		4304735345005S1
BONANZA 1023-4E	4	10S	23E	SWNW	U-33433		4304735339205S1
BONANZA 1023-6C	6	10S	23E	NENW	U-38419	UTU38419	4304735153005S1
BONANZA 1023-7B	7	10S	23E	NWNE	U-38420	UTU38420	4304735172005S1
BONANZA 1023-7L	7	10S	23E	NWSW	U-38420		4304735289005S1
BONANZA 11-02	11	10S	23E	SWNW	UTU38425	CR-23	4304734773005S1
BONANZA FEDERAL 03-15	15	10S	23E	NENW	UTU38428	UTU38428	4304731278005S1
CANYON VIEW FEDERAL 1-18	18	10S	23E	SENW	UTU38421	UTU38421	4304730379005S1
CIGE 008	35	09S	22E	SWSE	UTU010954A	891008900A	4304730427005S1
CIGE 009	36	09S	22E	NWSE	ML22650	891008900A	4304730419005S1
CIGE 010	2	10S	22E	NWSE	ML22651	891008900A	4304730425005S1
CIGE 031	1	10S	22E	SWNW	U011336	891008900A	4304730511005S1
CIGE 062D	36	09S	22E	NWSW	ML22650	891008900A	4304730885005S1
CIGE 067A	2	10S	22E	NENE	ML22651	891008900A	4304730938005S1
CIGE 068D	35	09S	22E	NWSW	UTU010954A	891008900A	4304730951005S1
CIGE 089D	34	09S	22E	SENE	UTU0149077	891008900A	4304731146005S1
CIGE 105D	1	10S	22E	NENW	U011336	891008900A	4304731758005S1
CIGE 118	35	09S	22E	NESE	UTU010954A	891008900A	4304732025005S1
CIGE 144	2	10S	22E	SWNE	ML22651	891008900A	4304732022005S1
CIGE 147	36	09S	22E	SESW	ML22650	891008900A	4304732020005S1
CIGE 153	35	09S	22E	SESW	UTU010954A	891008900A	4304732067005S1
CIGE 161	2	10S	22E	SESE	ML22651	891008900A	4304732168005S1
CIGE 162	36	09S	22E	SESE	ML22650	891008900A	4304732164005S1
CIGE 186	35	09S	22E	NWSE	UTU010954A	891008900A	4304732590005S1
CIGE 193	35	09S	22E	SESE	UTU010954A	891008900A	4304732973005S1
CIGE 194	1	10S	22E	SWNW	U011336	891008900A	4304732932005S1
CIGE 195	2	10S	22E	NWNE	ML22651	891008900A	4304732797005S1
CIGE 212	34	09S	22E	NENE	UTU0149077	891008900A	4304732938005S1
CIGE 221	36	09S	22E	SWSW	ML22650	891008900A	4304732868005S1
CIGE 222	36	09S	22E	NESW	ML22650	891008900A	4304732869005S1
CIGE 223	1	10S	22E	NWNW	U011336	891008900A	4304732983005S1
CLIFF EDGE 1-15	15	10S	23E	NWSE	UTU38427	UTU38427	4304730462005S1
CROOKED CYN FED 1-17	17	10S	23E	NESW	UTU37355	UTU37355	4304730369005S1
FLAT MESA FEDERAL 1-7	7	10S	23E	NWSE	UTU38420	UTU38420	4304730365005S1
FLAT MESA FEDERAL 2-7	7	10S	23E	SENW	UTU38420	UTU38420	4304730545005S1
JACK RABBIT 1-11	11	10S	23E	SWNE	UTU38425	CR-23	4304730423005S1
LOOKOUT POINT STATE 1-16	16	10S	23E	NESE	ML22186A		4304730544005S1
NBU 024N2	12	10S	22E	SESE	U01197A	891008900A	4304730535005S1
NBU 038N2	13	10S	22E	NWSW	U06512	891008900A	4304730536005S1
NBU 1022-1G	1	10S	22E	SWNE	U-11336	891008900A	4304735175005S1
NBU 922-35K	35	09S	22E	NESW	UTU-010954A	891008900A	4304735126005S1
NBU 922-36I	36	09S	22E	NESE	ML-22650	891008900A	4304735107005S1
NO NAME CANYON 1-9	9	10S	23E	SENE	UTU037355	UTU37355	4304730378005S1
NO NAME CANYON 2-9	9	10S	23E	NENW	UTU037355	UTU37355	4304731504005S1
NSO FEDERAL 1-12	12	10S	23E	NENW	UTU38423	CR-22	4304730560005S1
PETE'S FLAT 1-1	1	10S	23E	NESE	UTU40736		4304730558005S1
SAGE HEN FEDERAL 1-6	6	10S	23E	NESE	UTU38419	CR-3	4304730382005S1
SAGEBRUSH FEDERAL 1-8	8	10S	23E	SWNE	UTU37355	UTU37355	4304730383005S1
SHEEPHERDER FEDERAL 1-10	10	10S	23E	NESE	UTU38424	CR-5	4304730559005S1
SOUTHMAN CANYON 01-05 FED	5	10S	23E	SENW	UTU33433	UTU74473	4304730856005S1

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other	5. Lease Serial No. MULTIPLE WELLS- SEE ATTACHED
2. Name of Operator *WESTPORT OIL & GAS COMPANY, L.P.*	6. If Indian, Allottee or Tribe Name
3a. Address *1368 SOUTH 1200 EAST, VERNAL, UTAH 84078* 3b. Phone No. *(include area code)* *435-781-7060*	7. If Unit or CA/Agreement, Name and/or No. MULTIPLE WELLS- SEE ATTACHED
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)* *MULTIPLE WELLS- SEE ATTACHED*	8. Well Name and No. MULTIPLE WELLS- SEE ATTACHED 9. API Well No. MULTIPLE WELLS- SEE ATTACHED 10. Field and Pool, or Exploratory Area MULTIPLE WELLS- SEE ATTACHED 11. County or Parish, State UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

Westport Oil & Gas Company rescinds any previously approved disposal sites and proposes that any produced water from the attached list of wells on Exhibit A will be contained in a water tank and will then be hauled by truck to one of the following pre-approved disposal sites: Dalbo, Inc. Disposal Pit; RNI Disposal Pit, Sec. 5-T9S-R22E; Ace Oilfield Disposal, Sec. 2-T6S-R20E; Southman Canyon #3 SWD, Sec. 15-T10S-R23E, API No. 43047158800000S1 CIGE 9 SWD, Sec. 36-T9S-R22E; and Dirty Devil Federal 14-10 SWD, Sec. 10-T9S-R24E, API No. 430473056600S1. The disposal/emergency pits for the locations listed on Exhibit B will be reclaimed within the 2004 year. The rest of the locations that have disposal/emergency pits which are listed on Exhibit C will have their pits reclaimed by September 2008.

RECEIVED
JUL 27 2004
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)* DEBRA DOMENICI	Title ENVIRONMENTAL ASSISTANT
Signature Debra Domenici	Date July 22, 2004

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

EXHIBIT A

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
SOUTHMAN CANYON 04-04	4	10S	23E	NWSE	UTU33433	UTU33433	430473063200S1
SOUTHMAN CANYON 04-05	5	10S	23E	NESE	UTU33433	UTU33433	430473063300S1
SOUTHMAN CANYON 09-03M	9	10S	23E	SWSW	UTU37355	UTU37355	4304732540000S1
SOUTHMAN CANYON 09-04J	9	10S	23E	NWSE	UTU37355	UTU37355	430473254100S1
SOUTHMAN CANYON 31-01-L	31	09S	23E	NWSW	UTU33433	UTU74898	430473254300S1
SOUTHMAN CANYON 31-02X	31	09S	23E	NWNW	UTU33433	UTU33433	430473489800S1
SOUTHMAN CANYON 31-03	31	09S	23E	SENW	UTU33433	UTU33433	430473472600S1
SOUTHMAN CANYON 31-04	31	09S	23E	SESW	UTU33433		430473472700S1
SOUTHMAN CANYON 923-31B	31	09S	23E	NWNE	U-33433	UTU33433	430473515000S1
SOUTHMAN CANYON 923-31J	31	09S	23E	NWSE	U-33433	UTU33433	430473514900S1
SOUTHMAN CANYON 923-31P	31	09S	23E	SESE	U-33433		430473528800S1
SOUTHMAN CANYON SWD #3	15	10S	23E	NESE	UTU-38427		430471588000S1
WHITE RIVER 1-14	14	10S	23E	NENW	UTU38427	UTU38427	430473048100S1

EXHIBIT C
PITS TO BE RECLAIMED BY SEPTEMBER, 2008

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
CIGE 008	35	09S	22E	SWSE	UTU010954A	891008900A	430473042700S1
CIGE 009	36	09S	22E	NWSE	ML22650	891008900A	430473041900S1
CIGE 010	2	10S	22E	NWSE	ML22651	891008900A	430473042500S1
CIGE 031	1	10S	22E	SWNW	U011336	891008900A	430473051100S1
CIGE 062D	36	09S	22E	NWSW	ML22650	891008900A	430473088500S1
CIGE 067A	2	10S	22E	NENE	ML22651	891008900A	430473093800S1
CIGE 068D	35	09S	22E	NWSW	UTU010954A	891008900A	430473095100S1
CIGE 089D	34	09S	22E	SENE	UTU0149077	891008900A	430473114600S1
CIGE 105D	1	10S	22E	NENW	U011336	891008900A	4304731758OOS1
CIGE 118	35	09S	22E	NESE	UTU010954A	891008900A	430473202500S1
CIGE 144	2	10S	22E	SWNE	ML22651	891008900A	430473202200S1
CIGE 153	35	09S	22E	SESW	UTU010954A	891008900A	430473206700S1
CIGE 161	2	10S	22E	SESE	ML22651	891008900A	430473216800S1
CIGE 162	36	09S	22E	SESE	ML22650	891008900A	430473216400S1
NBU 024N2	12	10S	22E	SESE	U01197A	891008900A	430473053500S1
NBU 038N2	13	10S	22E	NWSW	U06512	891008900A	430473053600S1

EXHIBIT A

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
BONANZA 04-06	4	10S	23E	NESW	U-33433	UTU33433	4304734751005S1
BONANZA 06-02	6	10S	23E	NESW	UTU38419	UTU38419	4304734843005S1
BONANZA 08-02	8	10S	23E	SESE	UTU37355	UTU37355	4304734087005S1
BONANZA 08-03	8	10S	23E	NWNW	U-37355	UTU37355	4304734770005S1
BONANZA 09-05	9	10S	23E	SESW	U-37355	UTU37355	4304734866005S1
BONANZA 09-06	9	10S	23E	NWNE	U-37355	UTU37355	4304734771005S1
BONANZA 10-02	10	10S	23E	NWNW	U72028	UTU80201	4304734704005S1
BONANZA 10-03	10	10S	23E	NWNE	UTU38261	CR-5	4304734728005S1
BONANZA 10-04	10	10S	23E	SENE	UTU40736	CR-5	4304734772005S1
BONANZA 1023-2A	2	10S	23E	NENE	ML47062		4304735347005S1
BONANZA 1023-2C	2	10S	23E	NENW	ML47062		4304735346005S1
BONANZA 1023-2E	2	10S	23E	SWNW	ML47062		4304735345005S1
BONANZA 1023-4E	4	10S	23E	SWNW	U-33433		43047353920S1
BONANZA 1023-6C	6	10S	23E	NENW	U-38419	UTU38419	4304735153005S1
BONANZA 1023-7B	7	10S	23E	NWNE	U-38420	UTU38420	4304735172005S1
BONANZA 1023-7L	7	10S	23E	NWSW	U-38420		4304735289005S1
BONANZA 11-02	11	10S	23E	SWNW	UTU38425	CR-23	4304734773005S1
BONANZA FEDERAL 03-15	15	10S	23E	NENW	UTU38428	UTU38428	4304731278005S1
CANYON VIEW FEDERAL 1-18	18	10S	23E	SENW	UTU38421	UTU38421	4304730379005S1
CIGE 008	35	09S	22E	SWSE	UTU010954A	891008900A	4304730427005S1
CIGE 009	36	09S	22E	NWSE	ML22650	891008900A	4304730419005S1
CIGE 010	2	10S	22E	NWSE	ML22651	891008900A	4304730425005S1
CIGE 031	1	10S	22E	SWNW	U011336	891008900A	4304730511005S1
CIGE 062D	36	09S	22E	NWSW	ML22650	891008900A	4304730885005S1
CIGE 067A	2	10S	22E	NENE	ML22651	891008900A	4304730938005S1
CIGE 068D	35	09S	22E	NWSW	UTU010954A	891008900A	4304730951005S1
CIGE 089D	34	09S	22E	SENE	UTU0149077	891008900A	4304731146005S1
CIGE 105D	1	10S	22E	NENW	U011336	891008900A	4304731758005S1
CIGE 118	35	09S	22E	NESE	UTU010954A	891008900A	4304732025005S1
CIGE 144	2	10S	22E	SWNE	ML22651	891008900A	4304732022005S1
CIGE 147	36	09S	22E	SESW	ML22650	891008900A	4304732020005S1
CIGE 153	35	09S	22E	SESW	UTU010954A	891008900A	4304732067005S1
CIGE 161	2	10S	22E	SESE	ML22651	891008900A	4304732168005S1
CIGE 162	36	09S	22E	SESE	ML22650	891008900A	4304732164005S1
CIGE 186	35	09S	22E	NWSE	UTU010954A	891008900A	4304732590005S1
CIGE 193	35	09S	22E	SESE	UTU010954A	891008900A	4304732973005S1
CIGE 194	1	10S	22E	SWNW	U011336	891008900A	4304732932005S1
CIGE 195	2	10S	22E	NWNE	ML22651	891008900A	4304732797005S1
CIGE 212	34	09S	22E	NENE	UTU0149077	891008900A	4304732938005S1
CIGE 221	36	09S	22E	SWSW	ML22650	891008900A	4304732868005S1
CIGE 222	36	09S	22E	NESW	ML22650	891008900A	4304732869005S1
CIGE 223	1	10S	22E	NWNW	U011336	891008900A	4304732983005S1
CLIFF EDGE 1-15	15	10S	23E	NWSE	UTU38427	UTU38427	4304730462005S1
CROOKED CYN FED 1-17	17	10S	23E	NESW	UTU37355	UTU37355	4304730369005S1
FLAT MESA FEDERAL 1-7	7	10S	23E	NWSE	UTU38420	UTU38420	4304730365005S1
FLAT MESA FEDERAL 2-7	7	10S	23E	SENW	UTU38420	UTU38420	4304730545005S1
JACK RABBIT 1-11	11	10S	23E	SWNE	UTU38425	CR-23	4304730423005S1
LOOKOUT POINT STATE 1-16	16	10S	23E	NESE	ML22186A		4304730544005S1
NBU 024N2	12	10S	22E	SESE	U01197A	891008900A	4304730535005S1
NBU 038N2	13	10S	22E	NWSW	U06512	891008900A	4304730536005S1
NBU 1022-1G	1	10S	22E	SWNE	U-11336	891008900A	43047317500S1
NBU 922-35K	35	09S	22E	NESW	UTU-010954A	891008900A	4304735126005S1
NBU 922-36I	36	09S	22E	NESE	ML-22650	891008900A	4304735107005S1
NO NAME CANYON 1-9	9	10S	23E	SENE	UTU037355	UTU37355	4304730378005S1
NO NAME CANYON 2-9	9	10S	23E	NENW	UTU037355	UTU37355	4304731504005S1
NSO FEDERAL 1-12	12	10S	23E	NENW	UTU38423	CR-22	4304730560005S1
PETE'S FLAT 1-1	1	10S	23E	NESE	UTU40736		4304730558005S1
SAGE HEN FEDERAL 1-6	6	10S	23E	NESE	UTU38419	CR-3	4304730382005S1
SAGEBRUSH FEDERAL 1-8	8	10S	23E	SWNE	UTU37355	UTU37355	4304730383005S1
SHEEPHERDER FEDERAL 1-10	10	10S	23E	NESE	UTU38424	CR-5	4304730559005S1
SOUTHMAN CANYON 01-05 FED	5	10S	23E	SENW	UTU33433	UTU74473	4304730856005S1

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
SEE ATTACHED

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SEE ATTACHED

2. Name of Operator
WESTPORT OIL & GAS COMPANY L.P.

9. API Well No.
SEE ATTACHED

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area
VARIOUS

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SEE ATTACHED

11. County or Parish, State
UINTAH, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☒ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE OPERATOR REQUESTS AUTHORIZATION TO PLACE THE SUBJECT WELL LOCATIONS ON TEMPORARILY ABANDONMENT STATUS, UNTIL SUCH TIME THE WELL LOCATIONS CAN BE PLUGGED AND ABANDON.

PLEASE REFER TO THE ATTACHED LIST OF PROPOSED PLUG AND ABANDONMENTS FOR THE NEXT 5 YEARS.

COPY SENT TO OPERATOR
Date: 8-24-04
Initials: CHD

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 8/20/2004
BY: [signature]
* See Conditions of Approval (Attached)

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
Sheila Upchego	Regulatory Analyst
Signature	Date
[signature]	May 25, 2004

Federal Approval Of This Action Is Necessary

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED
JUN 03 2004
DIV. OF OIL, GAS & MINING

API #	WELL NAME	S-T-R	LEASE NUMBERS
43-047-			
	Proposed 2004 P&A's - 13 Wells		
31900	EAST GUSHER 15-1A	15-6-20 NENE	UTU-58007
30423	JACK RABBIT 1-11	11-10-23 SWNE	UTU-38425
32540	SOUTHMAN CANYON 09-03M	9-10-23 SWSW	UTU-37355
32543	SOUTHMAN CANYON 31-01-L	31-9-23 NWSW	UTU-33433
31100	NBU 070N3	3-10-22 SWNW	UTU-01191
30221	NBU 018	10-10-22 SWNE	UTU-025187
20280	WALKER HOLLOW U MCLISH 1	8-7-23 SWSW.	UTU-02651
30011	WALKER HOLLOW U MCLISH 2	8-7-23 SWSE	UTU-02651
30030	WALKER HOLLOW U MCLISH 4	8-7-23 NESW	UTU-02651
31034	WALKER HOLLOW UNIT 6	8-7-23 SESE	UTU-02651
30027	WALKER HOLLOW U MCLISH 3	8-7-23 NESE	UTU-02651
31092	WALKER HOLLOW UNIT J-8	8-7-23 NWSE	UTU-02651
31975	NBU 153	11-10-22 SWNW	U-01197A
	Proposed 2005 P&A's - 15 Wells		
31833	BASER DRAW 5-1	5-7-22 NWNW	UTU-075939
31834	BASER DRAW 6-1	6-7-22 NWNW	UTU-075939
31859	BASER DRAW FEDERAL 6-2	6-7-22 SWNE	UTU-075939
31304	COORS FEDERAL 14-1D	14-7-21 NWNW	UTU-65223
32009	COORS FEDERAL 2-10HB	10-7-21 NWNW	UTU-6522
30753	DM ICE FRIDAY 34-22	34-8-20 NESE	14-20-H62-2997
32333	FEDERAL 11-1-M	11-6-20 SWSW	UTU-64376
33831	HORSESHOE BEND FED 03-1	3-7-21 NWSE	UTU-0142175
33832	HORSESHOE BEND FED 04-1	4-7-21 NWSE	UTU-66401
33872	HORSESHOE BEND FED 26-3	26-6-21 NWSW	UTU-38401
33667	KENNEDY WASH FED 14-1	14-8-23 NWSW	UTU-71424
30623	SAND RIDGE FED 23-17	17-8-23 NESW	UTU-0143276
31508	STIRRUP FEDERAL 29-2	29-6-21 NWSE	UTU-46699
31634	STIRRUP FEDERAL 29-3	29-6-21 SESE	UTU-78854
30815	WEST WALKER FED. 1-33	33-6-22 NWSW	UTU-38411
	Proposed 2006 P&A's - 15 Wells		
30524	BITTER CREEK 01-03	3-11-22 SWNE	UTU-29797
30379	CANYON VIEW FEDERAL 1-18	18-10-23 SENW	UTU-38421
30369	CROOKED CYN FED 1-17	17-10-23 NENW	UTU-37355
31778	E BENCH UNIT #1	33-11-22 NWSE	UT-121P
30365	FLAT MESA FED. 1-7	7-10-23 NWSE	UTU-38420
30544	LOOKOUT POINT STATE 1-16	16-10-23 NESE	ML-221886A
30766	LOVE UNIT B2-3	3-11-21 SWSW	UTU-8347
30560	NSO FEDERAL 1-12	12-10-23 NENW	UTU-38423
30558	PETE'S FLAT 1-1	1-10-23 NESE	UTU-40736
30382	SAGE HEN FEDERAL 1-6	6-10-23 NESE	UTU-38419
30383	SAGEBRUSH FEDERAL 1-8	8-10-23 SWNE	UTU-37355
30856	SOUTHMAN CANYON 01-05 FED	5-10-23 SENW	UTU-33433
30632	SOUTHMAN CANYON 4-4	4-10-23 NWSE	UTU-33433
30481	WHITE RIVER 1-14	14-10-23 NENW	UTU-38427
31775	WILLOW CREEK UNIT #1	27-11-20 SENE	UT-128P

Proposed 2007 P&A's - 15 Wells

30494	CIGE 035	1-10-20 NESW	UTU-02270A
30542	CIGE 066	23-10-21 SENW	UTU-02278A
30952	CIGE 073D	5-10-22 SWSW	UTU-01191A
30953	CIGE 074D	6-10-22 NWSE	UTU-01195
31915	CIGE 114	34-9-21 NESE	U-01194A
34436	CIGE 282	7-10-22 NENE	ML-23609
30962	KURIP 01-027	1-9-20 NENW	14-20-H62-3004
30848	NBU 043	26-10-20 NWSE	UTU-4476
30534	NBU 047N2	30-10-22 SESW	UTU-0132568A
31250	NBU 087J	3-10-22 NESW	UTU-01191A
31923	NBU 114	5-10-21 SWSW	UTU-01393D
31982	NBU 149	5-10-22 NESE	UTU-01191
31992	NBU 150	9-10-22 SENW	UTU-01196B
32234	NBU 188	10-10-22 SWSW	U-01196C
33692	WONSITS FEDERAL 01-05	5-8-22 LOT 5	UTU-72633

Proposed 2008 P&A's - 11 wells

32401	NBU 213	15-10-22 NWNW	UTU-025187
32480	NBU 217	28-9-21 NESW	U-05678
32944	NBU 242	5-10-22 SWSE	UTU-01191
32917	NBU 253	10-9-21 SWNW	U-0141315
32929	NBU 262	33-9-21 NENE	UTU-0576
33011	NBU 278	30-9-22 SWSW	U-463
32976	NBU 285	3-10-22 NWNW	UTU-01191
32886	NBU 296 GR	24-10-20 NWNE	UTU-4485
33776	NBU 364	29-9-21 SESE	UTU-0581
30838	NBU 58N2	27-10-22 NENW	U-473
31327	NBU 98-V	34-9-21 SWSW	U-01194-A

69 total wells

State of Utah

Department of
Natural Resources

Division of
Oil, Gas & Mining

ROBERT L. MORGAN
Executive Director

LOWELL P. BRAXTON
Division Director

MICHAEL O. LEAVITT
Governor

OLENE S. WALKER
Lieutenant Governor

CONDITIONS OF APPROVAL TO EXTEND SI/TA OF WELL

Well Name and Number:	Several State and Federal wells
API Number:	See Sundry List
Operator:	Westport Oil and Gas Company L.P.
Reference Document:	Original Sundry dated May 25, 2004, received by DOGM on June 3, 2004

The Division of Oil, Gas and Mining (DOGM) accepts Westport's plan of action to Plug and Abandon sixty-nine wells by year-end 2008. Based upon the plan of action DOGM approves these sixty-nine (69) wells for extended shut-in until September 1, 2005.

Approval Conditions (Federal Approval necessary on all Federal/Indian wells):

1. If SI/TA is desired beyond the approval date listed above, the operator should submit a request for extended SI/TA at that time. Adherence to the accepted plan of action, wellbore conditions etc. will be taken into consideration.

2. A well monitoring program should be in place to ensure that health, safety and the environment are all protected (wellbore integrity).

3. Any changes in wellbore conditions or integrity; or sustained pressure on casing/casing annuli shall be reported to the Division immediately. A new monitoring program or remedial action may be necessary at that time.

Dustin K. Doucet
Petroleum Engineer

August 20, 2004
Date

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7223 • *www.ogm.utah.gov*

EXHIBIT B
PITS TO BE RECLAIMED IN 2004

WELL	LEGALS				STF LEASE NO	CA NUMBER	API NO
	SEC	TWN	RGE	QTR/QTR			
CIGE 008	35	09S	22E	SWSE	UTU010954A	891008900A	430473042700S1
CIGE 062D	36	09S	22E	NWSW	ML22650	891008900A	430473088500S1
CIGE 153	35	09S	22E	SESW	UTU010954A	891008900A	430473206700S1

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
UTU-33433

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SOUTHMAN CANYON 4-4

2. Name of Operator
WESTPORT OIL & GAS COMPANY
Contact: DEBRA DOMENICI
E-Mail: ddomenici@kmg.com

9. API Well No.
43-047-30632

3a. Address
1368 S 1200 E
VERNAL, UT 84078

3b. Phone No. (include area code)
Ph: 435.781.7060
Fx: 435.781.7094

10. Field and Pool, or Exploratory
BONANZA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 4 T10S R23E NWSE 1613FSL 1329FEL

11. County or Parish, and State
UINTAH COUNTY, UT

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

WESTPORT OIL & GAS COMPANY PROPOSES TO CONVERT THE SOUTHMAN CANYON 4-4 WELL FROM A PRODUCING WELL TO A CLASS II WATER INJECTION WELL TO DISPOSE OF PRODUCED WATERS FROM BONANZA/SOUTHMAN CANYON WELLS AS PER THE ATTACHED PROCEDURES.

APPLICATION TO THE EPA-UIC FOR A CLASS II INJECTION WELL WILL BE MADE ON 9/24/04.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY

RECEIVED
SEP 2 8 2004
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #36395 verified by the BLM Well Information System
For WESTPORT OIL & GAS COMPANY, sent to the Vernal

Name *(Printed/Typed)* DEBRA DOMENICI — Title ENVIRONMENTAL ASSISTANT

Signature Debra Domenici (Electronic Submission) — Date 09/20/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office _____

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

10S 23E 04
43047-30632

STATEMENT OF BASIS

WESTPORT OIL AND GAS COMPANY, L.P.
SOUTHMAN CANYON 4-4
UINTAH COUNTY, UT

EPA PERMIT NO. UT20984-06548

CONTACT: Chuck Tinsley
U. S. Environmental Protection Agency
Ground Water Program, 8P-W-GW
999 18th Street, Suite 300
Denver, Colorado 80202-2466
Telephone: 1-800-227-8917 ext. 6266

This STATEMENT OF BASIS gives the derivation of site-specific UIC Permit conditions and reasons for them. Referenced sections and conditions correspond to sections and conditions in the Permit.

UIC Permits specify the conditions and requirements for construction, operation, monitoring and reporting, and plugging of injection wells to prevent the movement of fluids into underground sources of drinking water (USDWs). Under 40 CFR 144 Subpart D, certain conditions apply to all UIC Permits and may be incorporated either expressly or by reference. General Permit conditions for which content is mandatory and not subject to site-specific differences (40 CFR Parts 144, 146 and 147) are not discussed in this document.

Upon the Effective Date when issued, the Permit authorizes the conversion and operation of a "new" injection well or wells governed by the conditions specified in the Permit. The Permit is issued for the operating life of the injection well or project unless terminated for reasonable cause under 40 CFR 144.39, 144.40 and 144.41. The Permit is subject to EPA review at least once every five (5) years to determine if action is required under 40 CFR 144.36(a).

PART I. General Information and Description of Facility

Westport Oil and Gas Company, L.P.
1368 South 1200 East
Vernal, UT 84078

on

October 15, 2004

submitted an application for an Underground Injection Control (UIC) Program Permit for the following injection well or wells:

Southman Canyon 4-4
1613 FSL 1329 FEL, NWSE S4, T10S, R23E
Uintah County, UT

Regulations specific to Uintah-Ouray Indian Reservation injection wells are found at 40 CFR 147 Subpart TT.

The Permit application, including the required information and data necessary to issue a UIC Permit in accordance with 40 CFR Parts 144, 146 and 147, was reviewed by EPA and determined to be complete.

The Permit will expire upon delegation of primary enforcement responsibility (primacy) for applicable portions of the UIC Program to the Ute Indian Tribe or the State of Utah unless the delegated agency has the authority and chooses to adopt and enforce this Permit as a Tribal or State Permit.

TABLE 1.1 shows the status of the well or wells as "New", "Existing", or "Conversion" and for Existing shows the original date of injection operation. Well authorization "by rule" under 40 CFR Part 144 Subpart C expires automatically on the Effective Date of an issued UIC Permit.

TABLE 1.1

WELL STATUS / DATE OF OPERATION

CONVERSION WELLS

Well Name	Well Status	Date of Operation
Southman Canyon 4-4	Conversion	N/A

PART II. Permit Considerations (40 CFR 146.24)

Geologic Setting (TABLE 2.1)

THE UINTA FORMATION (0'-1100')

The Uinta Formation is calcareous shale, some limestone, claystone, siltstone, and sandstone. It is a fluvial facies in the eastern and western ends of the basin that interfingers with rocks similar in appearance to the overlying Duchesne River Formation. It grades laterally into thinner bedded calcareous lake deposits in the center of the basin.

The Uinta is very low to very high permeability. Largest primary intergranular permeability of the sandstone seems to be about the same as that of the median for sandstone in the Duchesne River Formation. Most of the formation is finer grained, and, therefore, of lower primary permeability than the Duchesne River Formation. Permeability is greatly increased where the Uinta Formation Is fractured. In most of the area, the formation yields only a few gallons per minute of saline water to wells and springs. In some areas the water has high fluoride and boron concentrations. Locally, flowing wells yield fresh to slightly saline water. In the fluvial facies, particularly where the rocks are fractured, yields are larger.

THE GREEN RIVER FORMATION (1100'-4100')

The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite. The Green River interfingers with both the overlying Uinta and the underlying Wasatch Formations, as well as laterally with other formations near the edges of the basin.

The Green River Formation is very low to low permeability except where fractured. Sandstones near oil-shale beds have values of transmissivity from 0.9 to 2.4 sq ft/day. In most of the basin the formation yields only saline or briny water, though in and near the areas of outcrop in the southern part of the basin the water is fresh to slightly saline, and in the area of the outcrop near Strawberry Reservoir the water is fresh where the formation is fractured.

THE WASATCH FORMATION (4100'-6152')

In most of the basin, the Wasatch Formation is mainly lacustrine shale, sandstone, and conglomerate. It interfingers with the overlying and underlying formations and laterally with the North Horn, Currant Creek, and Green River Formations. The Wasatch outcrops only in the far eastern end of the northern Uinta Basin and in the canyons of deeply incised streams in the southern Uinta Basin.

The Wasatch Formation is very low to low permeability except where fractured. In the Greater Altamont-Bluebell oil field, the Wasatch sands reportedly have only 4 to 5 percent porosity, but are permeable because of fracturing. Much of the water produced with petroleum is moderately saline to very saline; generally, however, the water is less mineralized than is water from the Green River Formation.

THE MESAVERDE FORMATION (Top at 6152')

Continental deposits of shale, sandstone, and coal beds. Interfingers with the upper part of the underlying Mancos Shale and may interfinger with the overlying Currant Creek and North Horn Formations. Maximum thickness ranges from 550 to 4,000 feet in the western part of the basin

and from 400 to 1,160 feet in the eastern part of the basin.

Very low to high permeability. In areas of outcrop, water in the formation is fresh to slightly saline, but samples of water from petroleum tests in the eastern part of the basin reportedly were very saline to briny.

TABLE 2.1
GEOLOGIC SETTING
Southman Canyon 4-4

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Lithology
Uinta	0.00	1,100.00	< 10,000.00	The Uinta Formation is calcareous shale, some limestone, claystone, siltstone, and sandstone.
Green River	1,100.00	3,188.00	< 10,000.00	The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite.
Green River	3,188.00	4,100.00	> 10,000.00	The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone. The formation includes beds of oil shale and of carbonate evaporite.
Wasatch	4,100.00	6,162.00	> 10,000.00	In most of the basin, the Wasatch Formation is mainly lacustrine shale, sandstone, and conglomerate.
Mesaverde	6,162.00	8,670.00	> 10,000.00	Continental deposits of shale, sandstone, and coal beds.

Proposed Injection Zone(s) (TABLE 2.2)

An injection zone is a geological formation, group of formations, or part of a formation that receives fluids through a well. The proposed injection zones are listed in TABLE 2.2.

Injection will occur into an injection zone that is separated from USDWs by the confining zone which is free of known open faults or fractures within the Area of Review.

TABLE 2.2
INJECTION ZONES
Southman Canyon 4-4

Formation Name	Top (ft)	Base (ft)	TDS (mg/l)	Fracture Gradient (psi/ft)	Porosity	Exempted?*
Green River	3,945.00	4,100.00	> 10,000.00	0.733		N/A

*** C - Currently Exempted**
E - Previously Exempted
P - Proposed Exemption
N/A - Not Applicable

Confining Zone(s) (TABLE 2.3)

A confining zone is a geological formation, part of a formation, or a group of formations that limits fluid movement above the injection zone. The confining zone or zones are listed in TABLE 2.3.

TABLE 2.3
CONFINING ZONES
Southman Canyon 4-4

Formation Name	Formation Lithology	Top (ft)	Base (ft)
Green River	The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone.	3,757.00	3,945.00
Wasatch	In most of the basin, the Wasatch Formation is mainly lacustrine shale, sandstone, and conglomerate.	4,100.00	4,418.00

Underground Sources of Drinking Water (USDWs) (TABLE 2.4)

Aquifers or the portions thereof which contain less than 10,000 mg/l total dissolved solids (TDS) and are being or could in the future be used as a source of drinking water are considered to be USDWs. The USDWs in the area of this facility are identified in TABLE 2.4.

TABLE 2.4
UNDERGROUND SOURCES OF DRINKING WATER (USDW)
Southman Canyon 4-4

Formation Name	Formation Lithology	Top (ft)	Base (ft)	TDS (mg/l)
Uinta		0.00	1,100.00	< 10,000.00
	The Uinta Formation is calcareous shale, some limestone, claystone, siltstone, and sandstone.			
Green River	The Green River Formation is mostly lacustrine shale that contains some limestone, marlstone, and siltstone.	1,100.00	3,188.00	< 10,000.00

PART III. Well Construction (40 CFR 146.22)

TABLE 3.1
WELL CONSTRUCTION REQUIREMENTS
Southman Canyon 4-4

Casing Type	Hole Size (in)	Casing Size (in)	Cased Interval (ft)	Cemented Interval (ft)
Injection	7.88	5.50	0.00 - 4,350.00	0.00 - 4,350.00
Surface	12.25	9.63	0.00 - 2,762.00	0.00 - 2,762.00
Conductor	17.50	13.38	0.00 - 195.00	0.00 - 195.00
Abandoned Longstring	7.88	5.50	4,500.00 - 8,400.00	6,500.00 - 8,400.00

The approved well completion plan will be incorporated into the Permit as APPENDIX A and will be binding on the Permittee. Modification of the approved plan is allowed under 40 CFR 144.52(a)(1) provided written approval is obtained from the Director prior to actual modification.

Casing and Cementing (TABLE 3.1)

The construction plan for the well or wells proposed for conversion to an injection well was evaluated and determined to be in conformance with standard practices and guidelines that ensure well injection does not result in the movement of fluids into USDWs. Well construction and conversion details for the well or wells are shown in TABLE 3.1.

Tubing and Packer

Injection tubing is required to be installed from a packer up to the surface inside the well casing. The packer will be set above the uppermost perforation. The tubing and packer are designed to prevent injection fluid from coming into contact with the outermost casing.

Tubing-Casing Annulus (TCA)

The TCA allows the casing, tubing and packer to be pressure-tested periodically for mechanical integrity, and will allow for detection of leaks. The TCA will be filled with fresh water treated with a

corrosion inhibitor or other fluid approved by the Director.

Monitoring Devices

The permittee will be required to install and maintain wellhead equipment allowing for monitoring pressures and providing access for sampling the injected fluid. This equipment includes: 1) shut-off valves located at the wellhead on the injection tubing and on the TCA; 2) a flow meter that measures the cumulative volume of injected fluid; 3) pressure gauges attached to the injection tubing and the TCA to monitor the injection and TCA pressure; and 4) a tap on the injection line, isolated by shut-off valves, for sampling the injected fluid.

All sampling and measurement taken for monitoring must be representative of the monitored activity.

PART IV. Area of Review, Corrective Action Plan (40 CFR 144.55)

TABLE 4.1
AOR AND CORRECTIVE ACTION

Well Name	Type	Status (Abandoned Y/N)	Total Depth (ft)	TOC Depth (ft)	CAP Required (Y/N)
Bonanza 1023-40	Other	No	8,500.00	0.00	No
Bonanza 1023-4I	Producer	No	8,235.00	0.00	No

TABLE 4.1 lists the wells in the Area of Review ("AOR") and shows the well type, operating status, depth, top of casing cement ("TOC") and whether a Corrective Action Plan ("CAP") is required for the well.

Area Of Review

Applicants for Class I, II (other than "existing" wells) or III injection well Permits are required to identify the location of all known wells within the injection well's Area of Review (AOR) which penetrate the injection zone, or in the case of Class II wells operating over the fracture pressure of the formation, all known wells within the area of review that penetrate formations which may be affected by increased pressure. Under 40 CFR 146.6 the AOR may be a fixed radius of not less than one quarter (1/4) mile or a calculated zone of endangering influence. For Area Permits, a fixed width of not less than one quarter (1/4) mile for the circumscribing area may be used.

Corrective Action Plan

For wells in the AOR which are improperly sealed, completed, or abandoned, the applicant shall develop a Corrective Action Plan (CAP) consisting of the steps or modifications that are necessary to prevent movement of fluid into USDWs.

The CAP will be incorporated into the Permit as APPENDIX F and become binding on the permittee.

TABLE 4.1 lists the wells in the AOR, and shows the well type, operating status, depth, top of casing cement and whether a CAP is required for this well.

PART V. Well Operation Requirements (40 CFR 146.23)

TABLE 5.1
INJECTION ZONE PRESSURES
Southman Canyon 4-4

Formation Name	Depth Used to Calculate MAIP (ft)	Fracture Gradient (psi/ft)	Initial MAIP (psi)
Green River	3,945.00	0.733	1,120

Approved Injection Fluid

The approved injection fluid is limited to fluids which meet requirements pursuant to 40 CFR § 144.6(b). For disposal wells injecting water brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production, the fluid may be commingled and the well used to inject other Class II wastes such as drilling fluids and spent well completion, treatment and stimulation fluid. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are not approved.

This well is NOT approved for commercial brine injection, industrial waste fluid disposal or injection of hazardous waste as defined by CFR 40 Part 261.

Injection Pressure Limitation

Injection pressure, measured at the wellhead, shall not exceed a maximum calculated to assure that the pressure used during injection does not initiate new fractures or propagate existing fractures in the confining zones adjacent to the USDWs.

The applicant submitted injection fluid density and injection zone data which was used to calculate a formation fracture pressure and to determine the maximum allowable injection pressure (MAIP), as measured at the surface, for this Permit,

TABLE 5.1 lists the fracture gradient for the injection zone and the approved MAIP, determined according to the following formula:

$$FP = [fg - (0.433 * sg)] * d$$

FP = formation fracture pressure (measured at surface)
fg = fracture gradient (from submitted data or tests)
sg = specific gravity (of injected fluid)
d = depth to top of injection zone (or top perforation)

Injection Volume Limitation

Cumulative injected fluid volume limits are set to assure that injected fluids remain within the boundary of the exempted area. Cumulative injected fluid volume is limited when injection occurs into an aquifer that has been exempted from protection as a USDW.

Mechanical Integrity (40 CFR 146.8)

An injection well has mechanical integrity if:

1. there is no significant leak in the casing, tubing, or packer (Part I); and
2. there is no significant fluid movement into a USDW through vertical channels adjacent to the injection well bore (Part II).

The Permit prohibits injection into a well which lacks mechanical integrity.

The Permit requires that the well demonstrate mechanical integrity prior to injection and periodically thereafter. A demonstration of mechanical integrity includes both internal (Part I) and external (Part II). The methods and frequency for demonstrating Part I and Part II mechanical integrity are dependant upon well-specific conditions as explained below:

Well construction and site-specific conditions dictate the following requirements for Mechanical Integrity (MI) demonstrations:

Part I MI - Internal MI will be demonstrated prior to beginning injection. Since this well is constructed with a standard casing, tubing, and packer configuration, a successful test is required to take place at least once every five (5) years. A demonstration of Part I MI is also required prior to resuming injection following any workover operation that affects the casing, tubing, or packer.

Part II MI - The operator will install new 5-1/2" casing from surface to approximately 4350'. This casing will be cemented from 4350' to surface. A cement bond log (CBL) will be required and may be used to prove Part II Mechanical Integrity by showing the existance of cement with 80% or better bonding in a continuous 18' interval anywhere within the upper confining zone 3757-3945. If the CBL does not confirm that this cement meets or exceeds minimum requirements needed to demonstrate zone isolation through the confining zone, radioactive tracer logging will be required to prove Part II MI. This log will be designed to prove that injected fluid does not migrate out of the injection interval through channels between the casing and the open hole.

PART VI. Monitoring, Recordkeeping and Reporting Requirements

Injection Well Monitoring Program

At least once a year the permittee must analyze a sample of the injected fluid for total dissolved solids (TDS), specific conductivity, pH, and specific gravity. This analysis shall be reported to EPA annually as part of the Annual Report to the Director. Any time a new source of injected fluid is added, a fluid analysis shall be made of the new source.

Instantaneous injection pressure, injection flow rate, cumulative fluid volume and TCA pressures must be observed on a weekly basis. A recording, at least once every thirty (30) days, must be made of the injection pressure, injection flow rate and cumulative fluid volume, and the maximum and average value for each must be determined for each month. This information is required to be reported annually as part of the Annual Report to the Director.

PART VII. Plugging and Abandonment Requirements (40 CFR 146.10)

Plugging and Abandonment Plan

Prior to abandonment, the well or wells must be plugged with cement in a manner which will not allow the movement of fluids either into or between USDWs. The plugging and abandonment plan is described in Appendix E of the Permit.

PART VIII. Financial Responsibility (40 CFR 144.52)

Demonstration of Financial Responsibility

The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner prescribed by the Director. The permittee shall show evidence of such financial responsibility to the Director by the submission of a surety bond, or other adequate assurance such as financial statements or other materials acceptable to the Director. The Regional Administrator may, on a periodic basis, require the holder of a lifetime permit to submit a revised estimate of the resources needed to plug and abandon the well to reflect inflation of such costs, and a revised demonstration of financial responsibility if necessary. Initially, the operator has chosen to demonstrate financial responsibility with:

Surety Bond, received April 20, 2004

Evidence of continuing financial responsibility is required to be submitted to the Director annually.

10523E 04
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EPA

UNDERGROUND INJECTION CONTROL PROGRAM

PERMIT

PREPARED: October 2005

Permit No. UT20984-06548

Class II Salt Water Disposal Well

Southman Canyon 4-4
Uintah County, UT

Issued To

Westport Oil and Gas Company, L.P.
1368 South 1200 East
Vernal, UT 84078

Part I. AUTHORIZATION TO CONSTRUCT AND OPERATE

Under the authority of the Safe Drinking Water Act and Underground Injection Control (UIC) Program regulations of the U. S. Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 CFR) Parts 2, 124, 144, 146, and 147, and according to the terms of this Permit,

Westport Oil and Gas Company, L.P.
1368 South 1200 East
Vernal, UT 84078

is authorized to construct and to operate the following Class II injection well or wells:

Southman Canyon 4-4
1613 FSL 1329 FEL, NWSE S4, T10S, R23E
Uintah County, UT

Permit requirements herein are based on regulations found in 40 CFR Parts 124, 144, 146, and 147 which are in effect on the Effective Date of this Permit.

This Permit is based on representations made by the applicant and on other information contained in the Administrative Record. Misrepresentation of information or failure to fully disclose all relevant information may be cause for termination, revocation and reissuance, or modification of this Permit and/or formal enforcement action. This Permit will be reviewed periodically to determine whether action under 40 CFR 144.36(a) is required.

This Permit is issued for the life of the well or wells unless modified, revoked and reissued, or terminated under 40 CFR 144.39 or 144.40. This Permit may be adopted, modified, revoked and reissued, or terminated if primary enforcement authority for this program is delegated to an Indian Tribe or a State. Upon the effective date of delegation, all reports, notifications, questions and other compliance actions shall be directed to the Indian tribe or State Program Director or designee.

Issue Date: NOV - 3 2005

Effective Date NOV - 3 2005

for Stephen S. Tuber
Assistant Regional Administrator*
Office of Partnerships and Regulatory Assistance

*NOTE: The person holding this title is referred to as the "Director" throughout this Permit.

PART II. SPECIFIC PERMIT CONDITIONS

Section A. WELL CONSTRUCTION REQUIREMENTS

These requirements represent the approved minimum construction standards for well casing and cement, injection tubing, and packer.

Details of the approved well construction plan are incorporated into this Permit as APPENDIX A. Changes to the approved plan that may occur during construction must be approved by the Director prior to being physically incorporated.

1. Casing and Cement.

The well or wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The well casing and cement shall be designed for the life expectancy of the well and of the grade and size shown in APPENDIX A. Remedial cementing may be required if shown to be inadequate by cement bond log or other attempted demonstration of Part II (External) mechanical integrity.

2. Injection Tubing and Packer.

Injection tubing is required, and shall be run and set with a packer at or below the depth indicated in APPENDIX A. The packer setting depth may be changed provided it remains below the depth indicated in APPENDIX A and the Permittee provides notice and obtains the Director's approval for the change.

3. Sampling and Monitoring Devices.

The Permittee shall install and maintain in good operating condition:

(a) a "tap" at a conveniently accessible location on the injection flow line between the pump house or storage tanks and the injection well, isolated by shut-off valves, for collection of representative samples of the injected fluid; and

(b) one-half (1/2) inch female iron pipe fitting, isolated by shut-off valves and located at the wellhead at a conveniently accessible location, for the attachment of a pressure gauge capable of monitoring pressures ranging from normal operating pressures up to the Maximum Allowable Injection Pressure specified in APPENDIX C:

  (i) on the injection tubing; and

  (ii) on the tubing-casing annulus (TCA); and

(c) a pressure actuated shut-off device attached to the injection flow line set to shut-off the injection pump when or before the Maximum Allowable Injection Pressure specified in APPENDIX C is reached at the wellhead; and

(d) a non-resettable cumulative volume recorder attached to the injection line.

4. Well Logging and Testing

Well logging and testing requirements are found in APPENDIX B. The Permittee shall ensure the log and test requirements are performed within the time frames specified in APPENDIX B. Well logs and tests shall be performed according to current EPA-approved procedures. Well log and test results shall be submitted to the Director within sixty (60) days of completion of the logging or testing activity, and shall include a report describing the methods used during logging or testing and an interpretation of the test or log results.

5. Postponement of Construction or Conversion

The Permittee shall complete well construction within one year of the Effective Date of the Permit, or in the case of an Area Permit within one year of authorization of the additional well. Authorization to construct and operate shall expire if the well has not been constructed within one year of the Effective Date of the Permit or authorization and the Permit may be terminated under 40 CFR 144.40, unless the Permittee has notified the Director and requested an extension prior to expiration. Notification shall be in writing, and shall state the reasons for the delay and provide an estimated completion date. Once Authorization has expired under this part, the complete permit process including opportunity for public comment may be required before Authorization to construct and operate can be reissued.

6. Workovers and Alterations

Workovers and alterations shall meet all conditions of the Permit. Prior to beginning any addition or physical alteration to an injection well that may significantly affect the tubing, packer or casing, the Permittee shall give advance notice to the Director and obtain the Director's approval. The Permittee shall record all changes to well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workover, logging, or test data to EPA within sixty (60) days of completion of the activity.

A successful demonstration of Part I MI is required following the completion of any well workover or alteration which affects the casing, tubing, or packer. Injection operations shall not be resumed until the well has successfully demonstrated mechanical integrity and the Director has provided written approval to resume injection.

Section B. MECHANICAL INTEGRITY

The Permittee is required to ensure each injection well maintains mechanical integrity at all times. The Director, by written notice, may require the Permittee to comply with a schedule describing when mechanical integrity demonstrations shall be made.

An injection well has mechanical integrity if:

(a) There is no significant leak in the casing, tubing, or packer (Part I); and

(b) There is no significant fluid movement into an underground source of drinking water throught vertical channels adjacent to the injection well bore (Part II).

1. Demonstration of Mechanical Integrity (MI).

The operator shall demonstrate MI prior to commencing injection and periodically thereafter. Well-specific conditions dictate the methods and the frequency for demonstrating MI and are discussed in the Statement of Basis. The logs and tests are designed to demonstrate both internal (Part I) and external (Part II) MI as described above. The conditions present at this well site warrant the methods and frequency required in Appendix B of this Permit.

In addition to these regularly scheduled demonstrations of MI, the operator shall demonstrate internal (Part I) MI after any workover which affects the tubing, packer or casing.

The Director may require additional or alternative tests if the results presented by the operator are not satisfactory to the Director to demonstrate there is no movement of fluid into or between USDWs resulting from injection activity. Results of MI tests shall be submitted to the Director as soon as possible but no later than sixty (60) days after the test is complete.

2. Mechanical Integrity Test Methods and Criteria

EPA-approved methods shall be used to demonstrate mechanical integrity. A current copy of Ground Water Section Guidance No. 34 "Cement Bond Logging Techniques and Interpretation", Ground Water Section Guidance No. 37, "Demonstrating Part II (External) Mechanical Integrity for a Class II injection well permit", and Ground Water Section Guidance No. 39, "Pressure Testing Injection Wells for Part I (Internal) Mechanical Integrity" are provided at issuance of this Permit.

The Director may stipulate specific test methods and criteria best suited for a specific well construction and injection operation.

3. Notification Prior to Testing.

The Permittee shall notify the Director at least 30 days prior to any scheduled mechanical integrity test. The Director may allow a shorter notification period if it would be sufficient to enable EPA to witness the mechanical integrity test. Notification may be in the form of a yearly or quarterly schedule of planned mechanical integrity tests, or it may be on an individual basis.

4. Loss of Mechanical Integrity.

If the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity becomes evident during operation (such as presence of pressure in the TCA, water flowing at the surface, etc.), the Permittee shall notify the Director within 24 hours (see Part III Section E Paragraph 11(e) of this Permit), and the well shall be shut-in within 48 hours unless the Director requires immediate shut-in.

Within five days, the Permittee shall submit a follow-up written report that documents test results, repairs undertaken or a proposed remedial action plan.

Injection operations shall not be resumed until after the well has successfully been repaired and demonstrated mechanical integrity, and the Director has provided approval to resume injection.

Section C. WELL OPERATION

INJECTION BETWEEN THE OUTERMOST CASING PROTECTING UNDERGROUND SOURCES OF DRINKING WATER AND THE WELL BORE IS PROHIBITED.

Injection is approved under the following conditions:

1. Requirements Prior to Commencing Injection.

Injection operation may commence only after all construction and pre-injection requirements herein have been met and approved. Except for new wells authorized by an Area Permit under 40 CFR 144.33 (c), the Permittee may not commence injection until construction is complete, and

(a) The Permittee has submitted to the Director a notice of completion of construction and a completed EPA Form 7520-12; all applicable logging and testing requirements of this Permit (see APPENDIX B) have been fulfilled and the records submitted to the Director; mechanical integrity pursuant to 40 CFR 146.8 and Part II Section B of this Permit has been demonstrated; and

(i) The Director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the Permit; or

(ii) The Permittee has not received notice from the Director of his or her intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in Paragraph 1a, in which case prior inspection or review is waived and the Permittee may commence injection.

2. Injection Interval.

Injection is permitted only within the approved injection interval, listed in APPENDIX C. Additional individual injection perforations may be added provided that they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6.

3. Injection Pressure Limitation

(a) The permitted Maximum Allowable Injection Pressure (MAIP), measured at the wellhead, is found in APPENDIX C. Injection pressure shall not exceed the amount the Director determines is appropriate to ensure that injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to USDWs. In no case shall injection pressure cause the movement of injected or formation fluids into a USDW.

(b) The Permittee may request a change of the MAIP, or the MAIP may be increased or decreased by the Director in order to ensure that the requirements in Paragraph (a) above are fulfilled. The Permitee may be required to conduct a step rate injection test or other suitable test to provide information for determining the fracture pressure of the injection zone. Change of the permitted MAIP by the Director shall be by modification of this Permit and APPENDIX C.

4. Injection Volume Limitation.

Injection volume is limited to the total volume specified in APPENDIX C.

5. Injection Fluid Limitation.

Injected fluids are limited to those which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations unless those waters are classified as a hazardous waste at the time of injection, pursuant to 40 CFR 144.6(b). The well also may be used to inject approved Class II wastes brought to the surface such as drilling fluids and spent well completion, treatment and stimulation fluids. Non-exempt wastes, including unused fracturing fluids or acids, gas plant cooling tower cleaning wastes, service wastes and vacuum truck wastes, are NOT approved. This well is NOT approved for commercial brine or other fluid disposal operation.

6. Tubing-Casing Annulus (TCA)

The tubing-casing annulus (TCA) shall be filled with water treated with a corrosion inhibitor, or other fluid approved by the Director. The TCA valve shall remain closed during normal operating conditions and the TCA pressure shall be maintained at zero (0) psi.

If TCA pressure cannot be maintained at zero (0) psi, the Permittee shall follow the procedures in Ground Water Section Guidance No. 35 "Procedures to follow when excessive annular pressure is observed on a well."

Section D. MONITORING, RECORDKEEPING, AND REPORTING OF RESULTS

1. Monitoring Parameters, Frequency, Records and Reports.

Monitoring parameters are specified in APPENDIX D. Pressure monitoring recordings shall be taken at the wellhead. The listed parameters are to be monitored, recorded and reported at the frequency indicated in APPENDIX D even during periods when the well is not operating.

Monitoring records must include:

(a) the date, time, exact place and the results of the observation, sampling, measurement, or analysis, and;

(b) the name of the individual(s) who performed the observation, sampling, measurement, or analysis, and;

(c) the analytical techniques or methods used for analysis.

2. Monitoring Methods.

(a) Monitoring observations, measurements, samples, etc. taken for the purpose of complying with these requirements shall be representative of the activity or condition being monitored.

(b) Methods used to monitor the nature of the injected fluids must comply with analytical methods cited and described in Table 1 of 40 CFR 136.3 or Appendix III of 40 CFR 261, or by other methods that have been approved in writing by the Director.

(c) Injection pressure, annulus pressure, injection rate, and cumulative injected volumes shall be observed and recorded at the wellhead under normal operating conditions, and all parameters shall be observed simultaneously to provide a clear depiction of well operation.

(d) Pressures are to be measured in pounds per square inch (psi).

(e) Fluid volumes are to be measured in standard oil field barrels (bbl).

(f) Fluid rates are to be measured in barrels per day (bbl/day).

3. Records Retention.

(a) Records of calibration and maintenance, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained for a period of AT LEAST THREE (3) YEARS from the date of the sample, measurement, report, or application. This period may be extended anytime prior to its expiration by request of the Director.

(b) Records of the nature and composition of all injected fluids must be retained until three (3) years after the completion of any plugging and abandonment (P&A) procedures specified under 40 CFR 144.52(a)(6) or under Part 146 Subpart G, as appropriate. The Director may require the Permittee to deliver the records to the Director at the conclusion of the retention period. The Permittee shall continue to retain the records after the three (3) year retention period unless the Permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

(c) The Permittee shall retain records at the location designated in APPENDIX D.

4. Annual Reports.

Whether the well is operating or not, the Permittee shall submit an Annual Report to the Director that summarizes the results of the monitoring required by Part II Section D and APPENDIX D. The report of fluids injected during the year must identify each new fluid source by well name and location, and the field name or facility name.

The first Annual Report shall cover the period from the effective date of the Permit through December 31 of that year. Subsequent Annual Reports shall cover the period from January 1 through December 31 of the reporting year. Annual Reports shall be submitted by February 15 of the year following data collection. EPA Form 7520-11 may be copied and shall be used to submit the Annual Report, however, the monitoring requirements specified in this Permit are mandatory even if EPA Form 7520-11 indicates otherwise.

Section E. PLUGGING AND ABANDONMENT

1. Notification of Well Abandonment, Conversion or Closure.

The Permittee shall notify the Director in writing at least forty-five (45) days prior to: 1) plugging and abandoning an injection well, 2) converting to a non-injection well, and 3) in the case of an Area Permit, before closure of the project.

2. Well Plugging Requirements

Prior to abandonment, the injection well shall be plugged with cement in a manner which prevents the movement of fluids into or between underground sources of drinking water. Prior to placement of the cement plug(s) the well shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Director. The well shall be plugged in accordance with the approved plugging and abandonment plan and with 40 CFR 146.10.

3. Approved Plugging and Abandonment Plan.

The approved plugging and abandonment plan is incorporated into this Permit as APPENDIX E. Changes to the approved plugging and abandonment plan must be approved by the Director prior to beginning plugging operations. The Director also may require revision of the approved plugging and abandonment plan at any time prior to plugging the well.

4. Forty Five (45) Day Notice of Plugging and Abandonment.

The Permittee shall notify the Director at least forty-five (45) days prior to plugging and abandoning a well and provide notice of any anticipated change to the approved plugging and abanonment plan. .

5. Plugging and Abandonment Report.

Within sixty (60) days after plugging a well, the Permittee shall submit a report (EPA Form 7520-13) to the Director. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of either:

(a) A statement that the well was plugged in accordance with the approved plugging and abandonment plan; or

(b) Where actual plugging differed from the approved plugging and abandonment plan, an updated version of the plan, on the form supplied by the Director, specifying the differences.

6. Inactive Wells.

After any period of two years during which there is no injection the Permittee shall plug and abandon the well in accordance with Part II Section E Paragraph 2 of this Permit unless the Permittee:

(a) Provides written notice to the Director;

(b) Describes the actions or procedures the Permittee will take to ensure that the well will not endanger USDWs during the period of inactivity. These actions and procedures shall include compliance with mechanical integrity demonstration, Financial Responsibility and all other permit requirements designed to protect USDWs; and

(c) Receives written notice by the Director temporarily waiving plugging and abandonment requirements.

PART III. CONDITIONS APPLICABLE TO ALL PERMITS

Section A. EFFECT OF PERMIT

The Permittee is allowed to engage in underground injection in accordance with the conditions of this Permit. The Permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR 142 or may otherwise adversely affect the health of persons. Any underground injection activity not authorized by this Permit or by rule is prohibited. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any enforcement action brought under the provisions of Section 1431 of the Safe Drinking Water Act (SDWA) or any other law governing protection of public health or the environment, for any imminent and substantial endangerment to human health or the environment, nor does it serve as a shield to the Permittee's independent obligation to comply with all UIC regulations. Nothing in this Permit relieves the Permittee of any duties under applicable regulations.

Section B. CHANGES TO PERMIT CONDITIONS

1. Modification, Reissuance, or Termination.

The Director may, for cause or upon a request from the Permittee, modify, revoke and reissue, or terminate this Permit in accordance with 40 CFR 124.5, 144.12, 144.39, and 144.40. Also, this Permit is subject to minor modification for causes as specified in 40 CFR 144.41. The filing of a request for modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any condition of this Permit.

2. Conversions.

The Director may, for cause or upon a written request from the Permittee, allow conversion of the well from a Class II injection well to a non-Class II well. Conversion may not proceed until the Permittee receives written approval from the Director. Conditions of such conversion may include but are not limited to, approval of the proposed well rework, follow up demonstration of mechanical integrity, well-specific monitoring and reporting following the conversion, and demonstration of practical use of the converted configuration.

3. Transfer of Permit.

Under 40 CFR 144.38, this Permit is transferable provided the current Permittee notifies the Director at least thirty (30) days in advance of the proposed transfer date (EPA Form 7520-7) and provides a written agreement between the existing and new Permittees containing a specific date for transfer of Permit responsibility, coverage and liability between them. The notice shall adequately demonstrate that the financial responsibility requirements of 40 CFR 144.52(a)(7) will be met by the new Permittee. The Director may require modification or revocation and reissuance of the Permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Safe Drinking Water Act; in some cases, modification or revocation and reissuance is mandatory.

4. Permittee Change of Address.

Upon the Permittee's change of address, or whenever the operator changes the address where monitoring records are kept, the Permittee must provide written notice to the Director within 30 days.

5. Construction Changes, Workovers, Logging and Testing Data

The Permittee shall give advance notice to the Director, and shall obtain the Director's written approval prior to any physical alterations or additions to the permitted facility. Alterations or workovers shall meet all conditions as set forth in this permit. The Permittee shall record any changes to the well construction on a Well Rework Record (EPA Form 7520-12), and shall provide this and any other record of well workovers, logging , or test data to EPA within sixty (60) days of completion of the activity.

Following the completion of any well workovers or alterations which affect the casing, tubing, or packer, a successful demonstration of mechanical integrity (Part III, Section F of this permit) shall be made, and written authorization from the Director received, prior to resuming injection activities.

Section C. SEVERABILITY

The Provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

Section D. CONFIDENTIALITY

In accordance with 40 CFR Part 2 and 40 CFR 144.5, information submitted to EPA pursuant to this Permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

- The name and address of the Permittee, and
- information which deals with the existence, absence or level of contaminants in drinking water.

Section E. GENERAL PERMIT REQUIREMENTS

1. Duty to Comply.

The Permittee must comply with all conditions of this Permit. Any noncompliance constitutes a violation of the Safe Drinking Water Act (SDWA) and is grounds for enforcement action; for Permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application; except that the Permittee need not comply with the provisions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 CFR 144.34. All violations of the SDWA may subject the Permittee to penalties and/or criminal prosecution as specified in Section 1423 of the SDWA.

2. Duty to Reapply.

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, under 40 CFR 144.37 the Permittee must apply for a new permit prior to the expiration date.

3. Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

4. Duty to Mitigate.

The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Permit.

5. Proper Operation and Maintenance.

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit.

6. Permit Actions.

This Permit may be modified, revoked and reissued or teminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights.

This Permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information.

The Permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this Permit. The Permittee is required to submit any information required by this Permit or by the Director to the mailing address designated in writing by the Director.

9. Inspection and Entry.

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

(d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

10. Signatory Requirements.

All applications, reports or other information submitted to the Director shall be signed and certified according to 40 CFR 144.32. This section explains the requirements for persons duly authorized to sign documents, and provides wording for required certification.

11. Reporting Requirements.

(a) Planned changes. The Permittee shall give notice to the Director as soon as possible of any planned changes, physical alterations or additions to the permitted facility, and prior to commencing such changes.

(b) Anticipated noncompliance. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Monitoring Reports. Monitoring results shall be reported at the intervals specified in this Permit.

(d) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than 30 days following each schedule date.

(e) Twenty-four hour reporting. The Permittee shall report to the Director any noncompliance which may endanger human health or the environment, including:

(i) Any monitoring or other information which indicates that any contaminant may cause endangerment to a USDW; or

(ii) Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.

Information shall be provided, either directly or by leaving a message, within twenty-four (24) hours from the time the permittee becomes aware of the circumstances by telephoning (800) 227-8917 and requesting EPA Region VIII UIC Program Compliance and Technical Enforcement Director, or by contacting the EPA Region VIII Emergency Operations Center at (303) 293-1788.

In addition, a follow up written report shall be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

(f) Oil Spill and Chemical Release Reporting: The Permittee shall comply with all reporting requirements related to the occurence of oil spills and chemical releases by contacting the National Response Center (NRC) at (800) 424-8802, (202) 267-2675, or through the NRC website http://www.nrc.uscg.mil/index.htm.

(g) Other Noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs Part III, Section E Paragraph 11(b) or Section E, Paragraph 11(e) at the time the monitoring reports are submitted. The reports shall contain the information listed in Paragraph 11(e) of this Section.

(h) Other information. Where the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information to the Director.

Section F. FINANCIAL RESPONSIBILITY

1. Method of Providing Financial Responsibility.

The Permittee shall maintain continuous compliance with the requirement to maintain financial responsibility and resources to close, plug, and abandon the underground injection well(s). No substitution of a demonstration of financial responsibility shall become effective until the Permittee receives written notification from the Director that the alternative demonstration of financial responsibility is acceptable. The Director may, on a periodic basis, require the holder of a permit to revise the estimate of the resources needed to plug and abandon the well to reflect changes in such costs and may require the Permittee to provide a revised demonstration of financial responsibility.

2. Insolvency.

In the event of:

(a) the bankruptcy of the trustee or issuing institution of the financial mechanism; or

(b) suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) the institution issuing the financial mechanism losing its authority to issue such an instrument

the Permittee must notify the Director in writing, within ten (10) business days, and the Permittee must establish other financial assurance or liability coverage acceptable to the Director within sixty (60) days after any event specified in (a), (b), or (c) above.

The Permittee must also notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor, if named as debtor of a corporate guarantee, must make such a notification as required under the terms of the guarantee.

APPENDIX A

WELL CONSTRUCTION REQUIREMENTS

FORMATION DATA:

* Base of USDWs: Green River Formation at 3188'
* Confining Zones: Green River Formation interval 3757'-3945'
  Wasatch Formation interval 4100'-4418'
* Permitted Injection Zone: Green River Formation interval 3945'-4100'
* Original Authorized Injection perforations: 3945'-4100'

CURRENT WELL CONSTRUCTION:

* 13-3/8" conductor casing in 17-1/2" hole to 195' with 250 sx cement
* 9-5/8" surface casing in 12-1/4" hole to 2762' with 1200 sx cement
* 5-1/2" longstring casing in 7-7/8" hole to 8400' with 1000 sx cement
* Perforations: Mesaverde from 6939' - 7383'
* Well PBTD at 8612'
* Well TD at 8670'

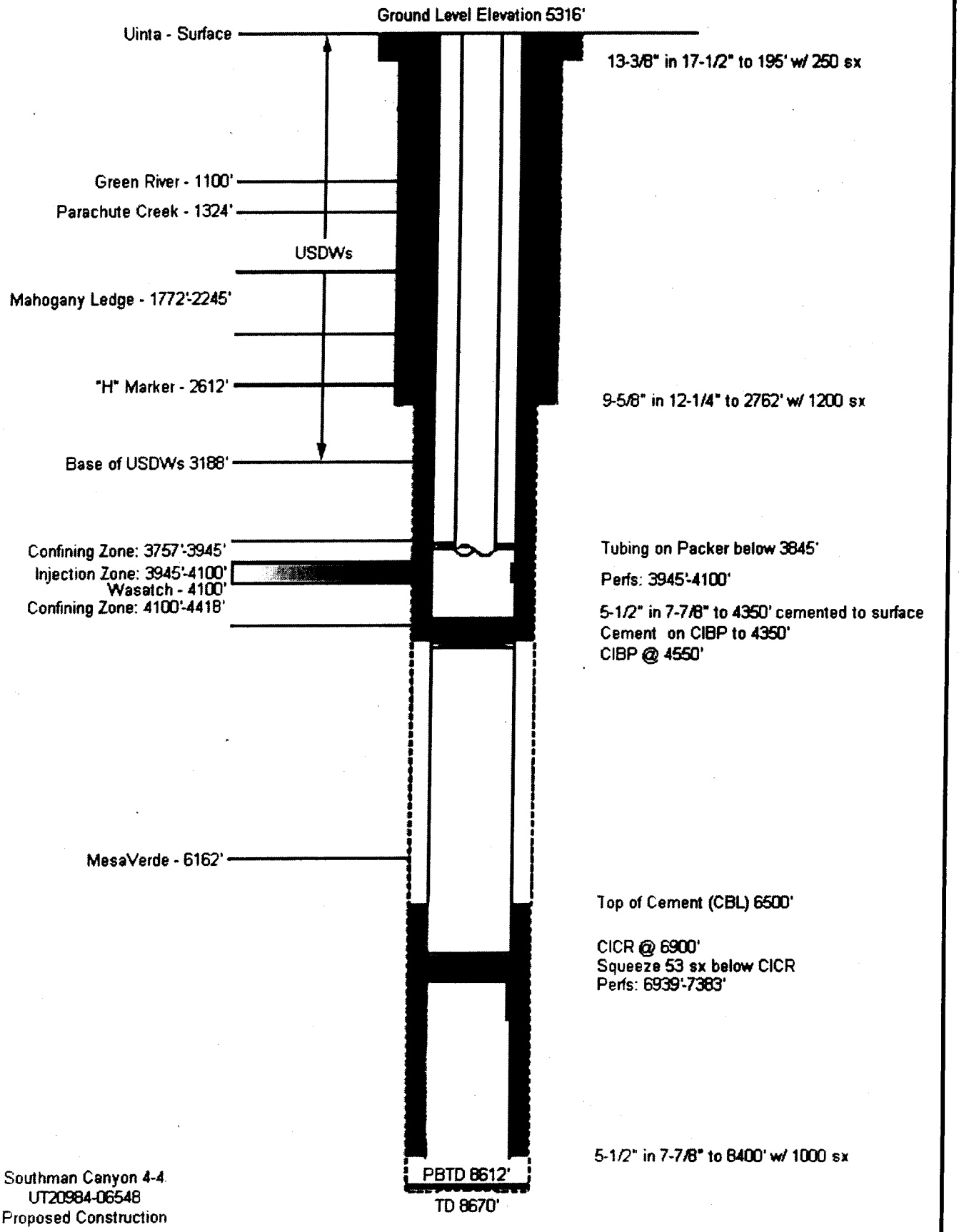
CONVERSION PROCEDURE:

* Set CICR at approx. 6900' and squeeze Mesaverde perfs with 53 sx cement
* Set CIBP at approx. 4550'
* Free-point, cut and pull 5-1/2"casing at approx. 4500'
* Spot cement inside 5-1/2" casing stub from approx 4550'-4500'
* Spot cement inside the open-hole from approx 4500'-4350' (tag and confirm plug depth)
* Run new 5-1/2" casing from surface to approx 4350' and cement to surface
* Clean out to PBTD of 4300'
* Run CBL from PBTD to surface (see Groundwater Section Guidance No. 34)
* Pressure test inside 5-1/2" casing
* Perforate 5-1/2" casing in the Green River interval 3945'-4100'
* Flow back the well to clean up.
* Obtain a clean sample of fluid for water quality analysis from the Green River interval 3945'-4100'
* Obtain a pore pressure for the Green River interval 3945'-4100'
* Step Rate Test (SRT) the Green River interval 3945'-4100' (see January 12, 1999 SRT procedure)

WELLHEAD EQUIPMENT:

* Sampling tap located to enable sampling fluid in the injection tubing
* Sampling tap located to enable sampling fluid in the 2-7/8" x 5-1/2" annulus
* Pressure gauge isolated by 1/2" FIP shut-off valve or quick-connect and located to

enable reading the pressure on the injection tubing
* Pressure gauge isolated by 1/2" FIP shut-off valve or quick-connect and located to enable reading the pressure on the 2-7/8" x 4-1/2" annulus
* Pressure actuated shut-off device located on the injection line, and set to prevent injection operations from exceeding the maximum allowable injection pressure
* Non-resettable cumulative volume recorder located on the injection line


Ground Level Elevation 5316'
Uinta - Surface
13-3/8" in 17-1/2" to 195' w/ 250 sx
Green River - 1100'
Parachute Creek - 1324'
USDWs
Mahogany Ledge - 1772'-2245'
"H" Marker - 2612'
9-5/8" in 12-1/4" to 2762' w/ 1200 sx
Base of USDWs 3188'
Confining Zone: 3757'-3945'
Injection Zone: 3945'-4100'
Wasatch - 4100'
Confining Zone: 4100'-4418'
Tubing on Packer below 3845'
Perfs: 3945'-4100'
5-1/2" in 7-7/8" to 4350' cemented to surface
Cement on CIBP to 4350'
CIBP @ 4550'
MesaVerde - 6162'
Top of Cement (CBL) 6500'
CICR @ 6900'
Squeeze 53 sx below CICR
Perfs: 6939'-7383'
5-1/2" in 7-7/8" to 8400' w/ 1000 sx
PBTD 8612'
TD 8670'
Southman Canyon 4-4
UT20984-06548
Proposed Construction
UT20984-06548_Constr_080905.bmp

APPENDIX B

LOGGING AND TESTING REQUIREMENTS

Logs.
Logs will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well logging required as a condition of this permit.

WELL NAME: Southman Canyon 4-4

TYPE OF LOG	DATE DUE
RATS	Will be required only if the CBL does not show a continuous 18 feet of greater than 80% bond through the upper confining zone (3757'-3945')
CBL/VDL/GAMMA RAY	Prior to beginning injection - This log must show a continuous 18 feet of greater than 80% bond through the upper confining zone (3757'-3945')

Tests.
Tests will be conducted according to current UIC guidance. It is the responsibility of the permittee to obtain and use guidance prior to conducting any well test required as a condition of this permit.

WELL NAME: Southman Canyon 4-4

TYPE OF TEST	DATE DUE
Step Rate Test	Prior to receiveing authorization to begin disposal operations
Standard Annulus Pressure	Prior to receiveing authorization to begin disposal operations and at least once every five (5) years after the last successful demonstration of Part I Mechanical Integrity.
Pore Pressure	Prior to receiveing authorization to begin disposal operations
Injection Zone Water Sample	Prior to receiveing authorization to begin disposal operations

APPENDIX C

OPERATING REQUIREMENTS

MAXIMUM ALLOWABLE INJECTION PRESSURE:

Maximum Allowable Injection Pressure (MAIP) as measured at the surface shall not exceed the pressure(s) listed below.

	MAXIMUM ALLOWED INJECTION PRESSURE (psi)
WELL NAME	ZONE 1 (Upper)
Southman Canyon 4-4	1,120

INJECTION INTERVAL(S):

Injection is permitted only within the approved injection interval listed below. Injection perforations may be altered provided they remain within the approved injection interval and the Permittee provides notice to the Director in accordance with Part II, Section A, Paragraph 6. Specific injection perforations can be found in Appendix A.

WELL NAME: Southman Canyon 4-4

	APPROVED INJECTION INTERVAL (GL, ft)		FRACTURE GRADIENT
FORMATION NAME	TOP	BOTTOM	(psi/ft)
Green River	3,945.00	4,100.00	0.733

ANNULUS PRESSURE:

The annulus pressure shall be maintained at zero (0) psi as measured at the wellhead. If this pressure cannot be maintained, the Permittee shall follow the procedures listed under Part II, Section C. 6. of this permit.

MAXIMUM INJECTION VOLUME:

There is no limitation on the number of barrels per day (bbls/day) of water that shall be injected into this well, provided further that in no case shall injection pressure exceed that limit shown in Appendix C.

APPENDIX D

MONITORING AND REPORTING PARAMETERS

This is a listing of the parameters required to be observed, recorded, and reported. Refer to the permit Part II, Section D, for detailed requirements for observing, recording, and reporting these parameters.

OBSERVE WEEKLY AND RECORD AT LEAST ONCE EVERY THIRTY DAYS	
OBSERVE AND RECORD	Injection pressure (psig)
	Annulus pressure(s) (psig)
	Injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbls)

ANNUALLY	
ANALYZE	Injected fluid total dissolved solids (mg/l)
	Injected fluid specific gravity
	Injected fluid specific conductivity
	Injected fluid pH

ANNUALLY	
REPORT	Each month's maximum and averaged injection pressures (psig)
	Each month's maximum and averaged annulus pressure(s) (psig)
	Each month's averaged injection rate (bbl/day)
	Fluid volume injected since the well began injecting (bbl)
	Written results of annual injected fluid analysis
	Sources of all fluids injected during the year

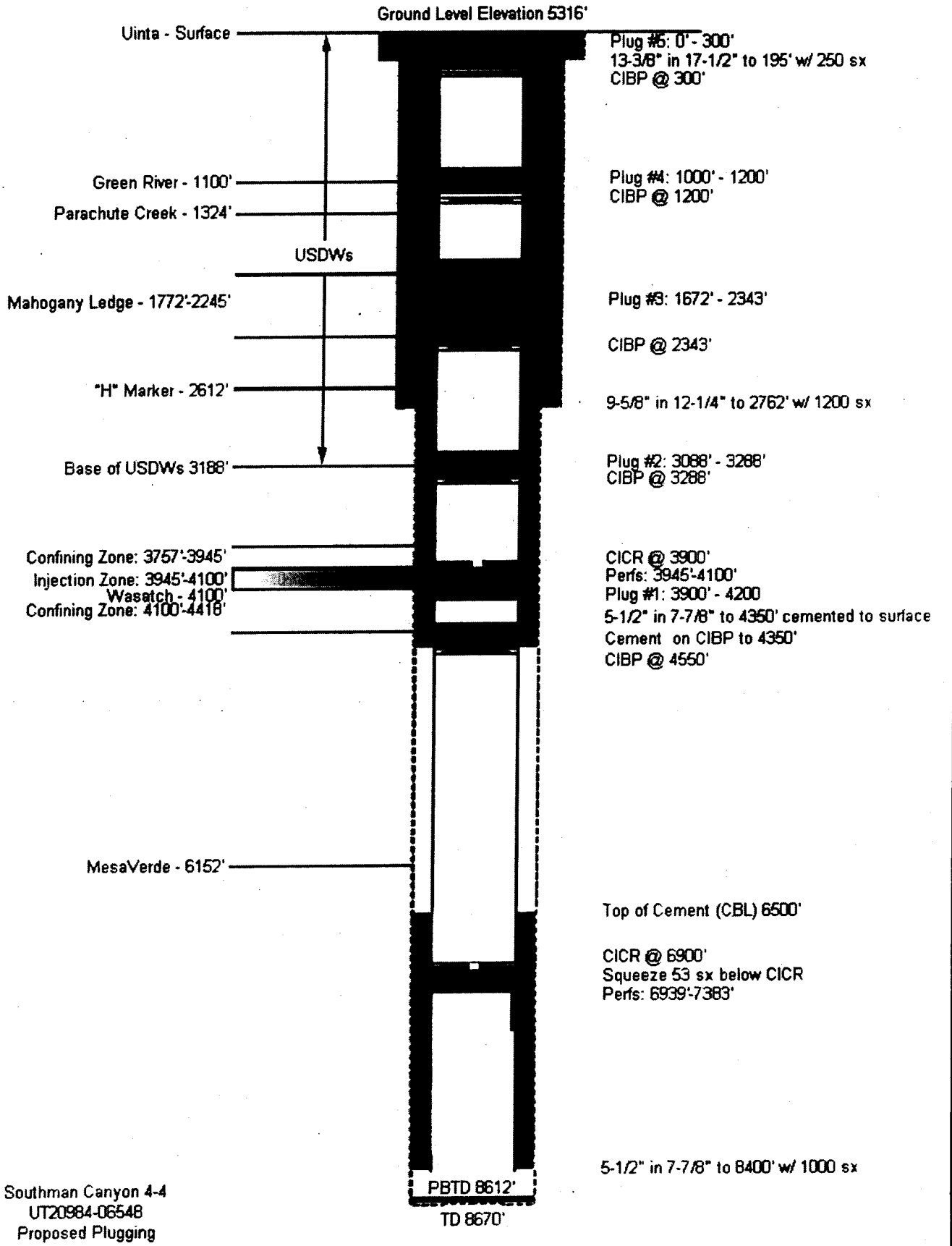
Records of all monitoring activities must be retained and made available for inspection at the following location:

Westport Oil and Gas Company, L.P.
1368 South 1200 East
Vernal, UT 84078

APPENDIX E

PLUGGING AND ABANDONMENT REQUIREMENTS

Perform Mechanical Integrity Test
Pull tubing and packer
Repair any casing leaks
Set CICR inside 5-1/2" casing at 3900'
Squeeze perforations below CICR with 26 cu.ft cement to isolate injection zone
Circulate well with 10 ppg brine
Set CIBP inside 5-1/2" casing at 3288'
Place cement plug inside 5-1/2" casing from 3288'-3088' to isolate base of USDWs
Set CIBP inside 5-1/2" casing at 2343'
Place cement plug inside 5-1/2" casing from 2343'-1672' to isolate the Mahogany Ledge Oil Shale
Set CIBP inside 5-1/2" casing at 1200'
Place cement plug inside 5-1/2" casing from 1200'-1000'
Set CIBP inside 5-1/2" casing at 300'
Place cement plug inside 5-1/2" casing from 300'-Surface



Southman Canyon 4-4
UT20984-06548
Proposed Plugging

UT20984-06548_PAPlan_080905.bmp

APPENDIX F

CORRECTIVE ACTION REQUIREMENTS

No corrective action is deemed necessary for this project.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18th STREET - SUITE 300
DENVER, CO 80202-2466
http://www.epa.gov/region08

NOV - 3 2005

43.047.30632
T-10S R-23E Sec. 4

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Carroll Estes
Westport Oil and Gas Co., LP
1368 South 1200 East
Vernal, UT 84078

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Re: Underground Injection Control Program
Permit for the Southman Canyon 4-4 Well
Uintah County, UT
EPA Permit No. UT20984-06548

Dear Mr. Estes:

Enclosed is your copy of the FINAL Underground Injection Control (UIC) Permit for the proposed Southman Canyon 4-4 injection well. A Statement of Basis, which discusses development of the conditions and requirements of the Permit, also is included.

The Public Comment period ended on OCT - 7 2005. There were no comments on the Draft Permit received during the Public Notice period, and therefore the Final Permit becomes effective on the date of issuance. All conditions set forth herein refer to Title 40 Parts 124, 144, 146, and 147 of the Code of Federal Regulations (CFR) and are regulations that are in effect on the date that this Permit becomes effective.

Please note that under the terms of the Final Permit, you are authorized only to construct the proposed injection well, and must fulfill the "Prior to Commencing Injection" requirements of the Permit, Part II Section C Subpart 1 and obtain written Authorization to Inject prior to commencing injection. It is your responsibility to be familiar with and to comply with all provisions of the Final Permit.

The Permit and the authorization to inject are issued for the operating life of the well unless terminated (Part III, Section B). The EPA will review this Permit at least every five (5) years to determine whether action under 40 CFR § 144.36(a) is warranted.

RECEIVED
NOV 09 2005
DIV. OF OIL, GAS & MINING

If you have any questions on the enclosed Final Permit or Statement of Basis, please call Chuck Tinsley of my staff at (303) 312-6266, or toll-free at (800) 227-8917, ext. 6266.

Sincerely,

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

enclosure:
Final UIC Permit
Statement of Basis
Form 7520-7 Application to Transfer Permit
Form 7520-11 Monitoring Report
Form 7520-14 Plugging Plan
Form 7520-12 Well Rework Record
Groundwater Section Guidance 34
Groundwater Section Guidance 35
Groundwater Section Guidance 37
Groundwater Section Guidance 39
Step Rate Test Procedure January 14, 1999

cc:
Ms. Maxine Natchees, Uintah and Ouray Business Committee
Ms. Elaine Willie, Ute Indian Tribe
Mr. Chester Mills, Bureau of Indian Affairs, U&O Agency
Mr. Gil Hunt, State of Utah, DOGM
Mr. Kirk Fleetwood, Bureau of Land Management

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET- SUITE 200
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

NOV 27 2006

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Mr. Carroll Estes
Anadarko Petroleum
1368 South 1200 East
Vernal, UT 84078

43.047.30632
10S 23E 4

Re: Underground Injection Control (UIC)
Expired UIC Permit
Southman Canyon 4-4
EPA Permit No. UT20984-06548
Uintah County, Utah

Dear Mr. Estes:

As of November 3, 2006, the Environmental Protection Agency (EPA) Underground Injection Control (UIC) permit for this well has expired under its own terms and is no longer in force and effect. This UIC permit was issued and became effective on November 3, 2005 with the provision that the well be converted for injection within one year. Failure to convert the well to injection status within this timeframe is the cause for this permit expiration.

Any future use of this well as an injection well will require a newly-issued UIC permit or, as applicable, authorization under an existing area permit, as allowed for in Title 40 of the Code of Federal Regulations (40 C.F.R.), Part 144. Any injection into this well without such permitting authorization will be considered unlawful.

Failure to comply with the UIC regulations found at 40 C.F.R. Parts 144 through 148 are violations of the Safe Drinking Water Act, 42 U.S.C. §300h. Such non-compliance may subject you to formal enforcement by EPA, as codified at 40 C.F.R. Part 22.

The Bureau of Land Management (BLM) office in Vernal, UT, will now assume regulatory responsibility for the operation of the well, and the financial responsibility for the operation and eventual plugging of this well is now covered by Anadarko's current bond with the BLM.

RECEIVED
NOV 30 2006
DIV. OF OIL, GAS & MINING

At your request, we will begin the process of releasing the bond you provided to EPA for the operation of this well under the terms of the UIC permit. Please send this request to:

Mr. Chuck Tinsley
Mail Code: 8P-W-GW
US EPA Region VIII
999 18th Street, Suite 200
Denver, CO 80202-2466

If you have any questions regarding this letter, you may contact Mr. Tinsley at (303) 312-6266.

Sincerely,

for Steve Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

cc: Mr. Gil Hunt, Director, Utah Division of Oil, Gas, and Mining
Mr. Michael Lee, Bureau of Land Management Vernal Office
Maxine Natchees, Acting Chairperson, Uintah & Ouray Business Committee
Shaun Chapoose, Director, Land Use Department, Ute Indian Tribe
Ronald Groves, Councilman, Uintah & Ouray Business Committee
Irene Cuch, Councilwoman, Uintah & Ouray Business Committee
Richard Jenks, Jr., Councilman, Uintah & Ouray Business Committee
Smiley Arrowchis, Councilman, Uintah & Ouray Business Committee
Francis Poowegup, Councilman, Uintah & Ouray Business Committee

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-33433

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SOUTHMAN CANYON 4-4

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304730632

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area
BONANZA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
NWSE SEC. 4, T10S, R23E 1613'FSL, 1329'FEL

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE OPERATOR REQUESTS AUTHORIZATION TO PLUG AND ABANDON THE SUBJECT WELL LOCATION. THE SUBJECT WELL LOCATION WAS GOING TO BE CONVERTED INTO A SALT WATER DISPOSAL WELL THE OPERATOR HAS DECIDED TO PLUG AND ABANDON THE WELL LOCATION.

PLEASE REFER TO THE ATTACHED PLUG AND ABANDON PROCEDURE.

COPY SENT TO OPERATOR
Date: 12-20-06
Initials: CHD

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
SENIOR LAND ADMIN SPECIALIST

Signature

Date
November 30, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

Title

Date

Federal Approval Of This Action Is Necessary

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Accepted by the Utah Division of Oil, Gas and Mining
Date: 12/18/06
By:

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

RECEIVED
DEC 06 2006
DIV. OF OIL, GAS & MINING

SOUTHMAN CANYON 4-4
1613' FSL & 1329' FEL
NWSE – Sec. 4 – T10S – R23E
Uintah County, UT

KBE:	5330'	**API NUMBER:**	43-047-30632
GLE:	5316'	**LEASE NUMBER:**	UTU-33433
TD:	8670'	**WI:**	100%
PBTD:	~8362' (FC)	**NRI:**	75%
		ORRI:	0%
		UNIT/CA #:	

CASING: 17.5" hole
13.625" 48# H-40 @ 195'.
Cemented with 250 sx. Class B, circulated 2 BC to surface. TOC @ surface by circulation.

12.25" hole
9.625" 36# K-55 @ 2768'
Cemented with 1000 sx. 50-50 Pozmix lead (1270 cuft) and 100 sx. Class G tail (115 cuft). Used ~160% of volume required for fill to surface. Circulated cement to surface, TOC @ surface by circulation. **Note** – Daily report for 4/17/1980 states that a CBL was run for the intermediate casing string, but provides no detail on the logging company used or the results. No copies of this CBL survive.

7.875" hole
5.5" 17# N-80 (0-1969') & 20# K-55 (1969-8406').
Cemented with 900 sx. Class G. TOC @ 6000' by CBL.

TUBING: 2.375" 4.7# J-55 landed at 7183'.

Tubular	**Drift inches**	**Collapse psi**	**Burst Psi**	**Capacities**		
				Gal./ft.	**Cuft/ft.**	**Bbl./ft.**
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1626	0.02173	0.00387
5.5" 17# N-80 csg.	4.767	6280	7740	0.9764	0.1305	0.02324
5.5" 20# K-55 csg.	4.653	6610	6310	0.9324	0.1245	0.0222
9.625" 36# K-55 csg	8.765	2020	3520	3.2470	0.4340	0.0773
7.875" borehole				2.5302	0.3382	0.0602
Annular Capacities						
2.375" tbg. X 5.5" 17# csg.				0.7462	0.0997	0.01776
2.375" tbg. X 5.5" 20# csg				0.7014	0.0937	0.0167
5.5" csg. X 9.625" 36# csg.				2.0118	0.2691	0.0479
9.625" csg. X 13.375" 48# csg				2.8182	0.3766	0.0671
5.5" csg. X 7.875" hole				1.2978	0.1733	0.0309
9.625" csg. X 12.25" hole				2.3436	0.3132	0.0558

GEOLOGIC INFORMATION:

Formation	Depth to top, ft.
Green River	1100'
Mahogany Ledge Oil Shale:	1772-2243'
Wasatch	4100'
Mesa Verde	6152'
Sego	8178'
Castlegate	8372'

Tech. Pub. #92 Base of USDW's

USDW Elevation	~2142' MSL
USDW Depth	~3188' KBE

EXISTING PERFORATIONS:

Formation	Date	Top	Bottom	SPF	Status
Mesa Verde	5/23/1989	6939		1	Open
Mesa Verde	5/23/1989	6944		1	Open
Mesa Verde	5/23/1989	6982		1	Open
Mesa Verde	5/23/1989	6986		1	Open
Mesa Verde	5/23/1989	6989		1	Open
Mesa Verde	5/23/1989	7010		1	Open
Mesa Verde	5/23/1989	7054		1	Open
Mesa Verde	5/23/1989	7152		1	Open
Mesa Verde	5/23/1989	7161		1	Open
Mesa Verde	5/23/1989	7279		1	Open
Mesa Verde	5/23/1989	7282		1	Open
Mesa Verde	5/23/1989	7285		1	Open
Mesa Verde	5/23/1989	7290		1	Open
Mesa Verde	5/23/1989	7321		1	Open
Mesa Verde	5/23/1989	7330		1	Open
Mesa Verde	5/23/1989	7333		1	Open
Mesa Verde	5/23/1989	7380		1	Open
Mesa Verde	5/23/1989	7383		1	Open

WELL HISTORY:

Completion – May 1989

- TD'd on 5/19/1980, not completed until nine years and several operators later.
- Perforated the gross **Mesa Verde** interval 6939' through 7383', acidized with 4000 gal. 7.5% NEFE using ball sealers, then fractured with 51000 gal. gel containing 90000# 20/40 mesh sand. Landed tubing at 7183'.
- Tested 410 MCFD, 4 BWPD, 1100 psi FTP, 1400 psi SICP, 16/64th choke on 7/20/1989.

There are no records of any other work of any type ever being done on the well.

SOUTHMAN CANYON 4-4 P&A PROCEDURE

GENERAL

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- BRINE WITH A MINIMUM DENSITY OF AT LEAST 9 PPG MUST BE PLACED BETWEEN ALL PLUGS. 10 PPG IS ASSUMED IN THIS PROCEDURE.
- NOTIFY THE BLM AT 435-781-4400 24 HOURS BEFORE MOVING ON LOCATION.

P&A PROCEDURE

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.

2. TOH WITH TUBING. RU WIRELINE AND MAKE A GAUGE RING RUN TO ~6950'.

3. **PLUG #1, PERFORATIONS (TOP PERF @ 6939'):** SET CIBP AT ~6935' AND SPOT ~50' (~6 SX. OR 6.225 CUFT.) CLASS G CEMENT ON TOP. DISPLACE WELL WITH 10 PPG BRINE.

4. **PLUG #2, WASATCH TOP (~4100'):** PERFORATE ~4200' WITH 4 SPF, SET CICR AT ~4000' AND SQUEEZE A MINIMUM OF ~31 SX OF CLASS G CEMENT BENEATH CICR (~35.3M6 CUFT.). DISPLACE WELL WITH 10 PPG BRINE.

5. **PLUG #3, BASE OF USDW (~3188'):** PERFORATE ~3288' WITH 4 SPF, SET CICR AT ~3088' AND SQUEEZE A MINIMUM OF ~29 SX OF CLASS G CEMENT BENEATH CICR (~32.87 CUFT.). DISPLACE WELL WITH 10 PPG BRINE.

6. **PLUG #4, 5 ½" CASING STUB & SHOE (~2768'):** CUT 5 ½" CASING @ ~2768'. PULL AND LD SAME. SPOT 50' (~14 SX. OR 15.1 CUFT.) CEMENT INSIDE CASING STUB & 5 ½" X 7 7/8" CASING ANNULUS. SPOT 200' (~76 SX OR 86.8 CUFT.) CEMENT ON TOP OF CASING STUB. DISPLACE WELL WITH 10 PPG BRINE.

7. **PLUG #5, GREEN RIVER TOP (~1100'):** RIH & SPOT A BALANCED CEMENT PLUG FROM ~1000' - ~1200' USING ~76 SX (86.8 CUFT.) OF CLASS G CEMENT. DISPLACE WELL WITH 10 PPG BRINE.

8. **PLUG #6, SURFACE:** FILL INTERMEDIATE CASING STRING F/ 500' TO SURFACE W/ ~190 SX (217 CUFT.) CEMENT.

9. CUT OFF WELLHEAD AND INSTALL MARKER PER BLM GUIDELINES.

10. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB.

ALM – 11/27/2006

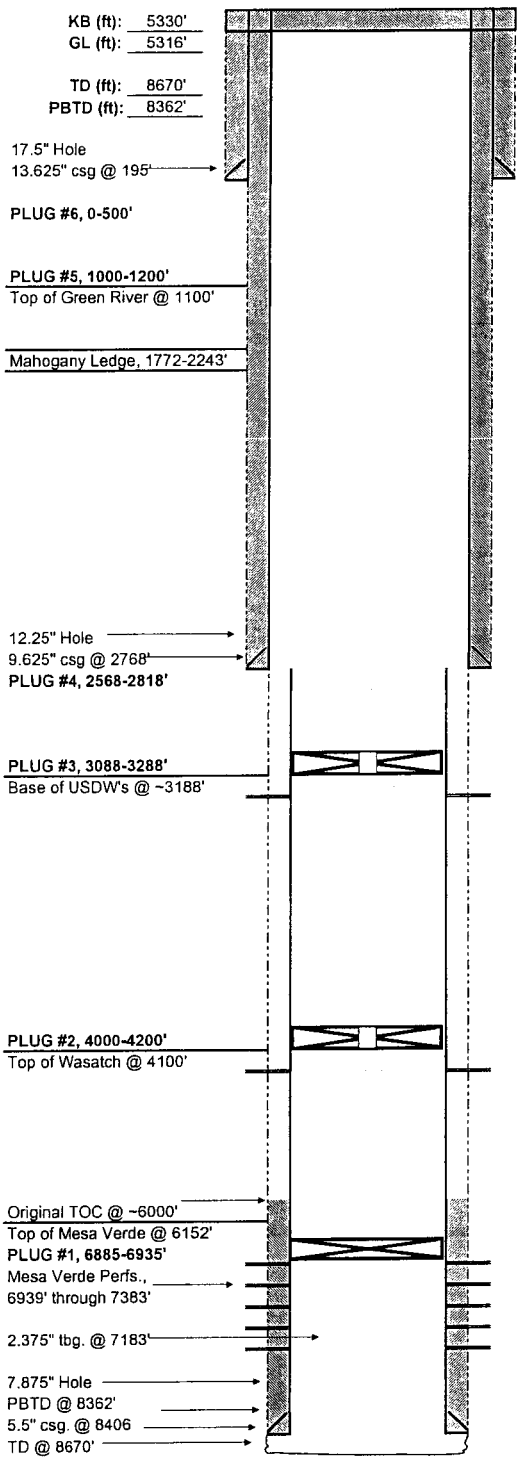
ATTACHMENT C2 - REVISED

WELL: SOUTHMAN CANYON 4-4
FIELD: BONANZA
API # 43-047-30632
EPA PERMIT #: UT20984-06548

CNTY: UINTAH
STATE: UTAH

FT.: 1613' FSL & 1329' FEL
LOC. NWSE-SEC. 4-T10S-R23E
LEASE: UTU-33433

PROPOSED P&A WELLBORE DIAGRAM



CASING RECORD

HOLE (in)	SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)
17.500	13.625	48	H-40	0	195
12.250	9.625	36	K-55	0	2768
7.875	5.500	17	N-80	0	1969
7.875	5.500	20	K-55	1,969	8406

TUBING RECORD

SIZE (in)	WT (lb/ft)	GRADE	TOP (ft)	BTM (ft)

ITEM	MAKER	SIZE (in)	TOP (ft)
PSN		2.375	7183

PERFORATION RECORD

ZONE	TOP (ft)	BTM (ft)	SPF	DATE SHOT	STATUS
Kmv	6939		1	5/23/89	Open
Kmv	6944		1	5/23/89	Open
Kmv	6982		1	5/23/89	Open
Kmv	6986		1	5/23/89	Open
Kmv	6989		1	5/23/89	Open
Kmv	7010		1	5/23/89	Open
Kmv	7054		1	5/23/89	Open
Kmv	7152		1	5/23/89	Open
Kmv	7161		1	5/23/89	Open
Kmv	7279		1	5/23/89	Open
Kmv	7282		1	5/23/89	Open
Kmv	7285		1	5/23/89	Open
Kmv	7290		1	5/23/89	Open
Kmv	7321		1	5/23/89	Open
Kmv	7330		1	5/23/89	Open
Kmv	7380		1	5/23/89	Open
Kmv	7383		1	5/23/89	Open

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-33433

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SOUTHMAN CANYON 4-4

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304730632

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area
BONANZA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
NWSE SEC. 4, T10S, R23E 1613'FSL, 1329'FEL

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE OPERATOR REQUESTS AUTHORIZATION TO PLUG AND ABANDON THE SUBJECT WELL LOCATION. THE BLM HAS APPROVED THE PLUG AND ABANDON PROCUEDURE. THE OPERATOR HAS REVISED THE PLUG AND ABANDON PROCEDURE. THE OPERATOR IS NO LONGER PLANNING ON CUTTING AND REMOVING THE 5" CSG SO PLUG #5 IS NO LONGER APPLICABLE AS THE ENTIRE PURPOSE OF THE PLUG WAS TO PLUG BACK THE CASING STUG.

PLEASE REFER TO THE ATTACHED REVISED PLUG AND ABANDON PROCEDURE.

RECEIVED
OCT 24 2007
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
SHEILA UPCHEGO	SENIOR LAND ADMIN SPECIALIST
Signature	Date
	October 22, 2007

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	Accepted by the Utah Division of Oil, Gas and Mining 11/27/07

Federal Approval Of This Action Is Necessary

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

BY:

(Instructions on reverse)

COPY SENT TO OPERATOR
Date: 11/28/2007
Initials: KS

SOUTHMAN CANYON 4-4
1613' FSL & 1329' FEL
NWSE – Sec. 4 – T10S – R23E
Uintah County, UT

KBE:	5330'	**API NUMBER:**	43-047-30632
GLE:	5316'	**LEASE NUMBER:**	UTU-33433
TD:	8670'	**WI:**	100%
PBTD:	~8362' (FC)	**NRI:**	75%
		ORRI:	0%
		UNIT/CA #:	

CASING: 17.5" hole
13.625" 48# H-40 @ 195'.
Cemented with 250 sx. Class B, circulated 2 BC to surface. TOC @ surface by circulation.

12.25" hole
9.625" 36# K-55 @ 2768'
Cemented with 1000 sx. 50-50 Pozmix lead (1270 cuft) and 100 sx. Class G tail (115 cuft). Used ~160% of volume required for fill to surface. Circulated cement to surface, TOC @ surface by circulation. **Note** – Daily report for 4/17/1980 states that a CBL was run for the intermediate casing string, but provides no detail on the logging company used or the results. No copies of this CBL survive.

7.875" hole
5.5" 17# N-80 (0-1969') & 20# K-55 (1969-8406').
Cemented with 900 sx. Class G. TOC @ 6000' by CBL.

TUBING: 2.375" 4.7# J-55 landed at 7183'.

Tubular	**Drift inches**	**Collapse psi**	**Burst Psi**	**Capacities**		
				Gal./ft.	**Cuft/ft.**	**Bbl./ft.**
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1626	0.02173	0.00387
5.5" 17# N-80 csg.	4.767	6280	7740	0.9764	0.1305	0.02324
5.5" 20# K-55 csg.	4.653	6610	6310	0.9324	0.1245	0.0222
9.625" 36# K-55 csg	8.765	2020	3520	3.2470	0.4340	0.0773
7.875" borehole				2.5302	0.3382	0.0602
Annular Capacities						
2.375" tbg. X 5.5" 17# csg.				0.7462	0.0997	0.01776
2.375" tbg. X 5.5" 20# csg				0.7014	0.0937	0.0167
5.5" csg. X 9.625" 36# csg.				2.0118	0.2691	0.0479
9.625" csg. X 13.375" 48# csg				2.8182	0.3766	0.0671
5.5" csg. X 7.875" hole				1.2978	0.1733	0.0309
9.625" csg. X 12.25" hole				2.3436	0.3132	0.0558

GEOLOGIC INFORMATION:

Formation	Depth to top, ft.
Green River	1100'
Mahogany Ledge Oil Shale:	1772-2243'
Wasatch	4100'
Mesa Verde	6152'
Sego	8178'
Castlegate	8372'

Tech. Pub. #92 Base of USDW's

USDW Elevation	~2142' MSL
USDW Depth	~3188' KBE

EXISTING PERFORATIONS:

Formation	Date	Top	Bottom	SPF	Status
Mesa Verde	5/23/1989	6939		1	Open
Mesa Verde	5/23/1989	6944		1	Open
Mesa Verde	5/23/1989	6982		1	Open
Mesa Verde	5/23/1989	6986		1	Open
Mesa Verde	5/23/1989	6989		1	Open
Mesa Verde	5/23/1989	7010		1	Open
Mesa Verde	5/23/1989	7054		1	Open
Mesa Verde	5/23/1989	7152		1	Open
Mesa Verde	5/23/1989	7161		1	Open
Mesa Verde	5/23/1989	7279		1	Open
Mesa Verde	5/23/1989	7282		1	Open
Mesa Verde	5/23/1989	7285		1	Open
Mesa Verde	5/23/1989	7290		1	Open
Mesa Verde	5/23/1989	7321		1	Open
Mesa Verde	5/23/1989	7330		1	Open
Mesa Verde	5/23/1989	7333		1	Open
Mesa Verde	5/23/1989	7380		1	Open
Mesa Verde	5/23/1989	7383		1	Open

WELL HISTORY:

Completion – May 1989

- TD'd on 5/19/1980, not completed until nine years and several operators later.
- Perforated the gross **Mesa Verde** interval 6939' through 7383', acidized with 4000 gal. 7.5% NEFE using ball sealers, then fractured with 51000 gal. gel containing 90000# 20/40 mesh sand. Landed tubing at 7183'.
- Tested 410 MCFD, 4 BWPD, 1100 psi FTP, 1400 psi SICP, 16/64th choke on 7/20/1989.

There are no records of any other work of any type ever being done on the well.

SOUTHMAN CANYON 4-4 P&A PROCEDURE

GENERAL

- H2S MAY BE PRESENT. CHECK FOR H2S AND TAKE APPROPRIATE PRECAUTIONS.
- CEMENT QUANTITIES BELOW ASSUME NEAT CLASS G, YIELD 1.145 CUFT./SX. IF A DIFFERENT PRODUCT IS USED, WELLSITE PERSONNEL ARE RESONSIBLE FOR CORRECTING QUANTITIES TO YIELD THE STATED SLURRY VOLUME. WHEN SQUEEZING, INCLUDE 10% EXCESS PER 1000' OF DEPTH.
- ALL BRINE USED FOR DISPLACEMENT WILL HAVE 5 GALS CORROSION INHIBITOR PER 100 BBLS WATER. BRINE WITH A MINIMUM DENSITY OF AT LEAST 9 PPG MUST BE PLACED BETWEEN ALL PLUGS. 10 PPG IS ASSUMED IN THIS PROCEDURE.
- NOTIFY THE BLM AT 435-781-4400 24 HOURS BEFORE MOVING ON LOCATION.

P&A PROCEDURE

1. MIRU. KILL WELL AS NEEDED. ND WH, NU AND TEST BOPE.

2. TOH WITH TUBING. RU WIRELINE AND MAKE A GAUGE RING RUN TO ~6950'.

3. **PLUG #1, PERFORATIONS (TOP PERF @ 6939'):** SET CIBP AT ~6900' AND SPOT ~50' (~6 SX. OR 6.225 CUFT.) CLASS G CEMENT ON TOP. DISPLACE WELL WITH 10 PPG BRINE.

4. **PLUG #2, MV TOP (~6152'):** RIH & SPOT A BALANCED CEMENT PLUG FROM ~6052' - ~6252' USING ~60 SX (52.4 CUFT.) OF CLASS G CEMENT. DISPLACE WELL WITH 10 PPG BRINE.

5. **PLUG #3, WASATCH TOP (~4100'):** PERFORATE ~4200' WITH 4 SPF, SET CICR AT ~4000' AND SQUEEZE A MINIMUM OF ~54 SX OF CLASS G CEMENT BENEATH CICR (47.16 CUFT.). SPOT 6 SX CMT ON TOP. DISPLACE WELL WITH 10 PPG BRINE.

6. **PLUG #4, BASE OF USDW (~3188'):** PERFORATE ~3288' WITH 4 SPF, SET CICR AT ~3088' AND SQUEEZE A MINIMUM OF ~54 SX OF CLASS G CEMENT BENEATH CICR (~47.16 CUFT.). SPOT 6 SX CMT ON TOP. DISPLACE WELL WITH 10 PPG BRINE.

7. **RIH & TAG PLUG #4.**

8. **PLUG #5, GREEN RIVER TOP (~1100'):** PERFORATE ~1200' WITH 4 SPF, SET CICR AT ~1000' AND SQUEEZE A MINIMUM OF ~54 SX OF CLASS G CEMENT BENEATH CICR (~47.16 CUFT.). SPOT 6 SX CMT ON TOP. DISPLACE WELL WITH 10 PPG BRINE.

9. **PLUG #6, SURFACE:** PUMP ~175 SX (~199.8 CUFT.) DOWN 5 ½" CSG & CSG ANNULUS. FILL TO SURFACE.

10. CUT OFF WELLHEAD AND INSTALL MARKER PER BLM GUIDELINES.

11. RDMO. TURN OVER TO OPERATIONS FOR SURFACE REHAB.

ALM – 11/27/2006
REVISED 10/22/07

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
UTU-33433

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
SOUTHMAN CANYON 4-4

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.
4304730632

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area
BONANZA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
NWSE SEC. 4, T10S, R23E 1613'FSL, 1329'FEL

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
☐ Final Abandonment Notice	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

THE SUBJECT WELL LOCATION WAS PLUG AND ABANDON ON 11/30/2007.

PLEASE REFER TO THE ATTACHED WELL BORE DIAGRAM AND PROCEDURE.

RECEIVED
DEC 14 2007
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*
SHEILA UPCHEGO

Title
SENIOR LAND ADMIN SPECIALIST

Signature

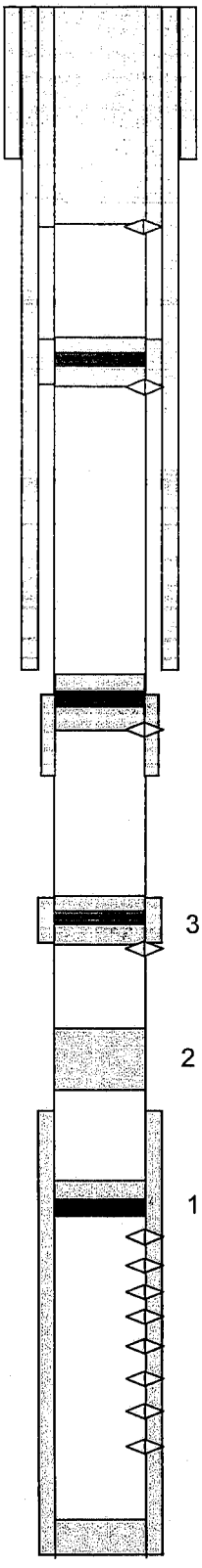
Date
November 30, 2007

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)



COMPANY: ANADARKO		SURFACE	CASING	CASING
WELL NAME: SOUTHMAN CANYON 4-4	SIZE:	13-3/8"	9-5/8"	4-1/2"
FIELD: NATURAL BUTTES	WEIGHT:	48#	36#	17# / 20#
COUNTY: UINTAH	GRADE:	H-40	K-95	N-80/K-55
STATE: UTAH	THREAD:			
DATE: 11-30-07	DEPTH:	195'	2768'	1969'/8406'

ITEM	DESCRIPTION	MAX. O.D. INCHES	MIN. I.D. INCHES	LENGTH FEET
PLUG #6	PERF 4 SPF AT 500'. CIRC CMT DOWN 5-1/2" AND UP			
	SURFACE. PUMP 43 BBLS CMT. RETURNED 7 BBLS			
	SURFACE. PUTS 36 BBLS GOOD CMT FOR SURFACE			
	PLUG. 175 SX.			
PLUG #5	PERF 4 SPF AT 1200'. CICR AT 1013'. GOOD RETURNS			
	UP SURFACE. PUMP 60 SX CMT TOTAL. 54 SX			
	AND 6 SX ABOVE. TOC AT 962' INSIDE.			
PLUG #4	PERF 4 SPF AT 3289. CICR AT 3083'. UNABLE TO GET			
	CIRCULATION UP SURFACE CSG. PUMP 165 SX CMT			
	TOTAL. 120 SX BELOW CICR (20 BBLS CMT BEHIND			
	5-1/2" CSG) AND 45 SX ABOVE CICR. TOC INSIDE			
PLUG #3	PERF 4 SPF AT 4200'. CICR AT 4018'. PUMP 60 SX			
	TOTAL. 54 SX BELOW CICR AND 6 SX ABOVE.			
	TOC INSIDE 3964'			
PLUG #2	BALANCED CMT PLUG OF 60 SX. TOC AT 5714' AND			
	BOC AT 6267'			
PLUG #1	CIBP SET AT 6902'. SPOT 10 SX CMT ON TOP.			
	TOC INSIDE 6847'			
	PROD PERFS: 6939', 6944', 6982', 6986', 6989', 7010',			
	7152', 7161', 7279', 7282', 7285', 7290', 7321', 7330', 7333',			
	7380', 7383'.			
	HAVE 10# BRINE W/ INHIBITORS BETWEEN ALL			
	PLUGS. ALL CMT IS 'G', 15.8#, 1.15Y. NOTE:			
	WAS MADE TO CIRCULATE SURFACE W/ PERFS AT			
	3289'.			
	CSG CUT OFF 3' BELOW SURFACE AND HAVE A 3'x3'			
	MARKER PLATE WELDED ON TOP W/ WEEP HOLE.			

PREPARED BY:
FRANK WINN

PREPARED FOR:	OFFICE:	FAX:

C. F. WINN WELL SERVICES, INC.

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING
1. DJJ
2. CDW

X Change of Operator (Well Sold) Operator Name Change/Merger

The operator of the well(s) listed below has changed, effective: **1/6/2006**

FROM: (Old Operator):	**TO:** (New Operator):
N2115-Westport Oil & Gas Co., LP	N2995-Kerr-McGee Oil & Gas Onshore, LP
1368 South 1200 East	1368 South 1200 East
Vernal, UT 84078	Vernal, UT 84078
Phone: 1-(435) 781-7024	Phone: 1-(435) 781-7024

CA No. **Unit:**

WELL NAME	SEC TWN RNG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS

OPERATOR CHANGES DOCUMENTATION

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on: 5/10/2006
2. (R649-8-10) Sundry or legal documentation was received from the **NEW** operator on: 5/10/2006
3. The new company was checked on the **Department of Commerce, Division of Corporations Database on:** 3/7/2006
4a. Is the new operator registered in the State of Utah: YES Business Number: 1355743-0181
4b. If **NO**, the operator was contacted contacted on:
5a. (R649-9-2)Waste Management Plan has been received on: IN PLACE
5b. Inspections of LA PA state/fee well sites complete on: n/a
5c. Reports current for Production/Disposition & Sundries on: ok
6. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM 3/27/2006 BIA not yet
7. **Federal and Indian Units:**
The BLM or BIA has approved the successor of unit operator for wells listed on: 3/27/2006
8. **Federal and Indian Communization Agreements ("CA"):**
The BLM or BIA has approved the operator for all wells listed within a CA on: n/a
9. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject,** for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on:

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database on:** 5/15/2006
2. Changes have been entered on the **Monthly Operator Change Spread Sheet on:** 5/15/2006
3. Bond information entered in RBDMS on: 5/15/2006
4. Fee/State wells attached to bond in RBDMS on: 5/16/2006
5. Injection Projects to new operator in RBDMS on:
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a Name Change Only

BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: CO1203
2. Indian well(s) covered by Bond Number: RLB0005239
3. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0005236
a. The **FORMER** operator has requested a release of liability from their bond on: n/a rider added KMG
The Division sent response by letter on:

LEASE INTEREST OWNER NOTIFICATION:

4. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: 5/16/2006

COMMENTS:

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires Jnovember 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE LEASES

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MUTIPLE WELLS

2. Name of Operator
KERR-McGEE OIL & GAS ONSHORE LP

9. API Well No.

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SEE ATTACHED

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☒ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other CHANGE OF OPERATOR
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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PLEASE BE ADVISED THAT KERR-McGEE OIL & GAS ONSHORE LP, IS CONSIDERED TO BE THE OPERATOR OF THE ATTACHED WELL LOCATIONS. EFFECTIVE JANUARY 6, 2006.
KERR-McGEE OIL & GAS ONSHORE LP, IS RESPONSIBLE UNDER TERMS AND CONDITIONS OF THE LEASE(S) FOR THE OPERATIONS CONDUCTED UPON LEASE LANDS. BOND COVERAGE IS PROVIDED BY STATE OF UTAH NATIONWIDE BOND NO. RLB0005237.

RECEIVED
MAY 10 2006
DIV. OF OIL, GAS & MINING

BLM BOND = CO1203
BIA BOND = RLB0005239

APPROVED 5/16/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
RANDY BAYNE	DRILLING MANAGER
Signature	Date
	May 9, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires Jnovember 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

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SUBMIT IN TRIPLICATE – Other instructions on reverse side

5. Lease Serial No.
MULTIPLE LEASES

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
MUTIPLE WELLS

2. Name of Operator
WESTPORT OIL & GAS COMPANY L.P.

9. API Well No.

3a. Address
1368 SOUTH 1200 EAST VERNAL, UT 84078

3b. Phone No. *(include area code)*
(435) 781-7024

10. Field and Pool, or Exploratory Area

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SEE ATTACHED

11. County or Parish, State
UINTAH COUNTY, UTAH

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
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☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other CHANGE OF OPERATOR
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.

EFFECTIVE JANUARY 6, 2006, WESTPORT OIL & GAS COMPANY L.P., HAS RELINQUISHED THE OPERATORSHIP OF THE ATTACHED WELL LOCATIONS TO KERR-McGEE OIL & GAS ONSHORE LP.

APPROVED 5/16/06
Earlene Russell
Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

RECEIVED
MAY 10 2006
DIV. OF OIL, GAS & MINING

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
BRAD LANEY	ENGINEERING SPECIALIST
Signature	Date
	May 9, 2006

THIS SPACE FOR FEDERAL OR STATE USE

Approved by	Title	Date
Brad Laney		5-9-06
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1001, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:
CO922 (MM)
3106
COC017387 et. al.

March 23, 2006

NOTICE

Kerr-McGee Oil & Gas Onshore L.P. :
1999 Broadway, Suite 3700 : Oil & Gas
Denver, CO 80202 :

Merger/Name Change - Recognized

On February 28, 2006 this office received acceptable evidence of the following mergers and name conversion:

> Kerr-McGee Oil & Gas Onshore L.P., a Delaware Limited Partnership, and Kerr-McGee Oil & Gas Onshore LLC, a Delaware Limited Partnership merger with and into Westport Oil and Gas Company L.P., a Delaware Limited Partnership, and subsequent Westport Oil & Gas Company L.P. name conversion to Kerr-McGee Oil & Gas Onshore L.P.

For our purposes the merger and name conversion was effective January 4, 2006, the date the Secretary of State of Delaware authenticated the mergers and name conversion.

Kerr-McGee Oil & Gas Onshore L.P. provided a list of oil and gas leases held by the merging parties with the request that the Bureau of Land Management change all their lease records from the named entities to the new entity, Kerr-McGee Oil & Gas Onshore L.P. In response to this request each state is asked to retrieve their own list of leases in the names of these entities from the Bureau of Land Management's (BLM) automated LR2000 data base.

The oil and gas lease files identified on the list provided by Kerr-McGee Oil & Gas Onshore L.P. have been updated as to the merger and name conversion. We have not abstracted the lease files to determine if the entities affected by the acceptance of these documents holds an interest in the lease, nor have we attempt to identify leases where the entity is the operator on the ground that maintains vested record title or operating rights interests. If additional documentation, for change of operator, is required you will be contacted directly by the appropriate Field Office. The Mineral Management Services (MMS) and other applicable BLM offices were notified of the merger with a copy of this notice

Please contact this office if you identify additional leases where the merging party maintains an interest, under our jurisdiction, and we will document the case files with a copy of this notice. If the leases are under the jurisdiction of another State Office that information will be forwarded to them for their action.

Three riders accompanied the merger/name conversion documents which will add Kerr-McGee Oil and Gas Onshore LLC as a principal to the 3 Kerr-McGee bonds maintained by the Wyoming State Office. These riders will be forward to them for their acceptance.

The Nationwide Oil & Gas Continental Casualty Company Bond #158626364 (BLM Bond #CO1203), maintained by the Colorado State Office, will remain in full force and effect until an assumption rider is accepted by the Wyoming State Office that conditions their Nationwide Safeco bond to accept all outstanding liability on the oil and gas leases attached to the Colorado bond.

If you have questions about this action you may call me at 303.239.3768.

/s/Martha L. Maxwell
Martha L. Maxwell
Land Law Examiner
Fluid Minerals Adjudication

Attachment:
List of OG Leases to each of the following offices:
MMS MRM, MS 357B-1
WY, UT, NM/OK/TX, MT/ND, WY State Offices
CO Field Offices
Wyoming State Office
Rider #1 to Bond WY2357
Rider #2 to Bond WY1865
Rider #3 to Bond WY1127

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Utah State Office
P.O. Box 45155
Salt Lake City, UT 84145-0155
http://www.blm.gov

IN REPLY REFER TO:
3106
(UT-922)

March 27, 2006

Memorandum

To: Vernal Field Office

From: Chief, Branch of Fluid Minerals

Subject: Merger Approval

Attached is an approved copy of the merger recognized by the Bureau of Land Management, Colorado State Office. We have updated our records to reflect the merger from Westport Oil and Gas Company L.P. into Kerr-McGee Onshore Oil and Gas Company. The merger was approved effective January 4, 2006.

Chief, Branch of
Fluid Minerals

Enclosure
Approval letter from BLM COSO (2 pp)

cc: MMS, Reference Data Branch, James Sykes, PO Box 25165, Denver CO 80225
State of Utah, DOGM, Attn: Earlene Russell, PO Box 145801, SLC UT 84114
Teresa Thompson
Joe Incardine
Connie Seare
Dave Mascarenas
Susan Bauman